Patent Application Publication

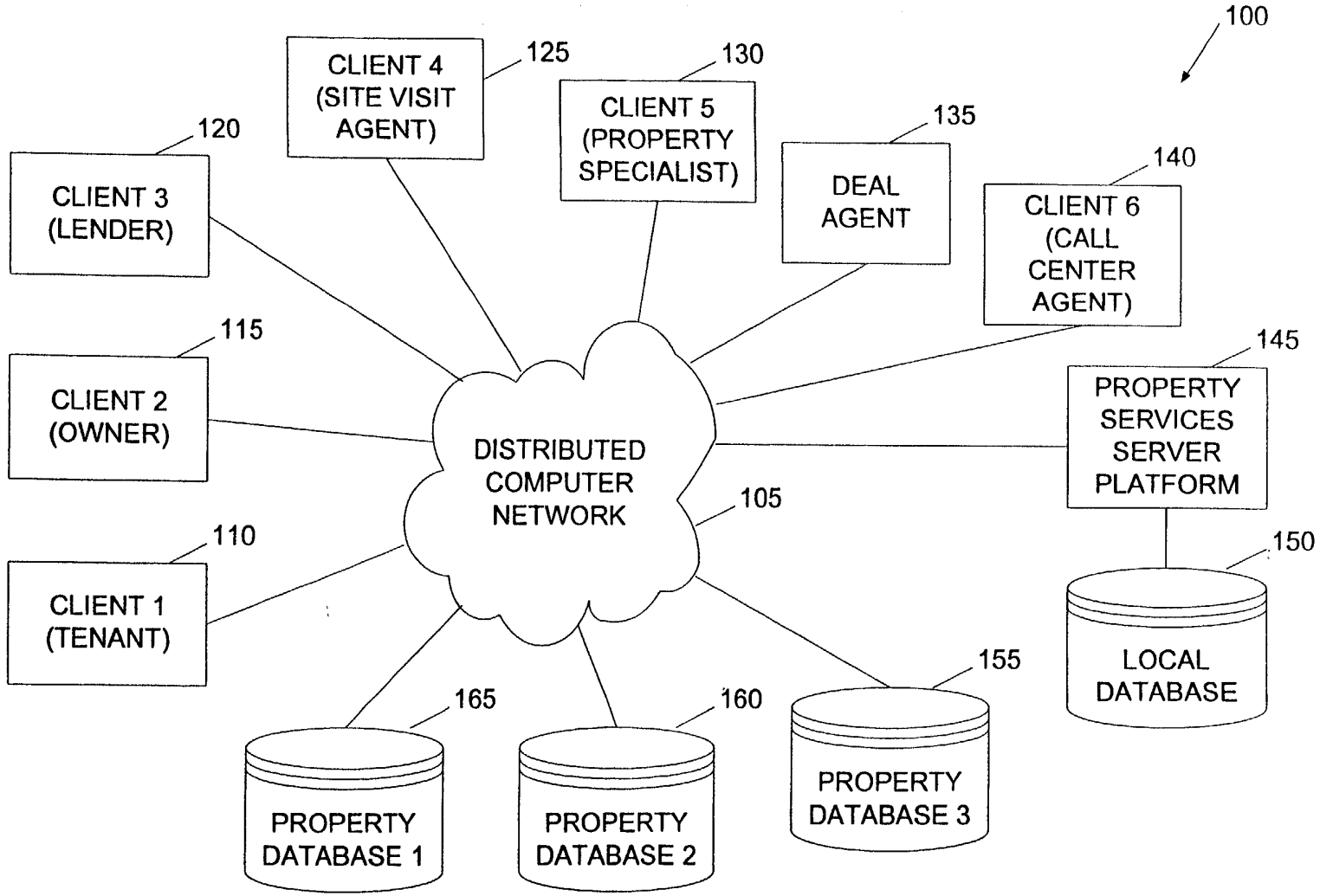


Fig. 1

FIG. 2

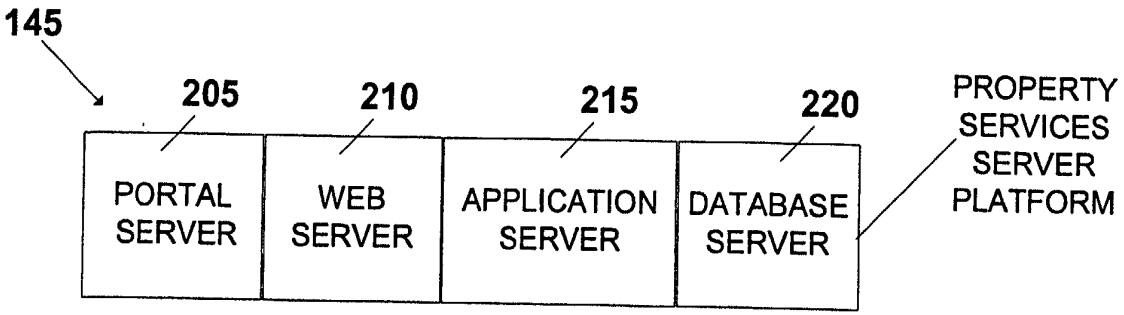

145
205
210
215
220
PORTAL SERVER
WEB SERVER
APPLICATION SERVER
DATABASE SERVER
PROPERTY SERVICES SERVER PLATFORM

FIG. 3

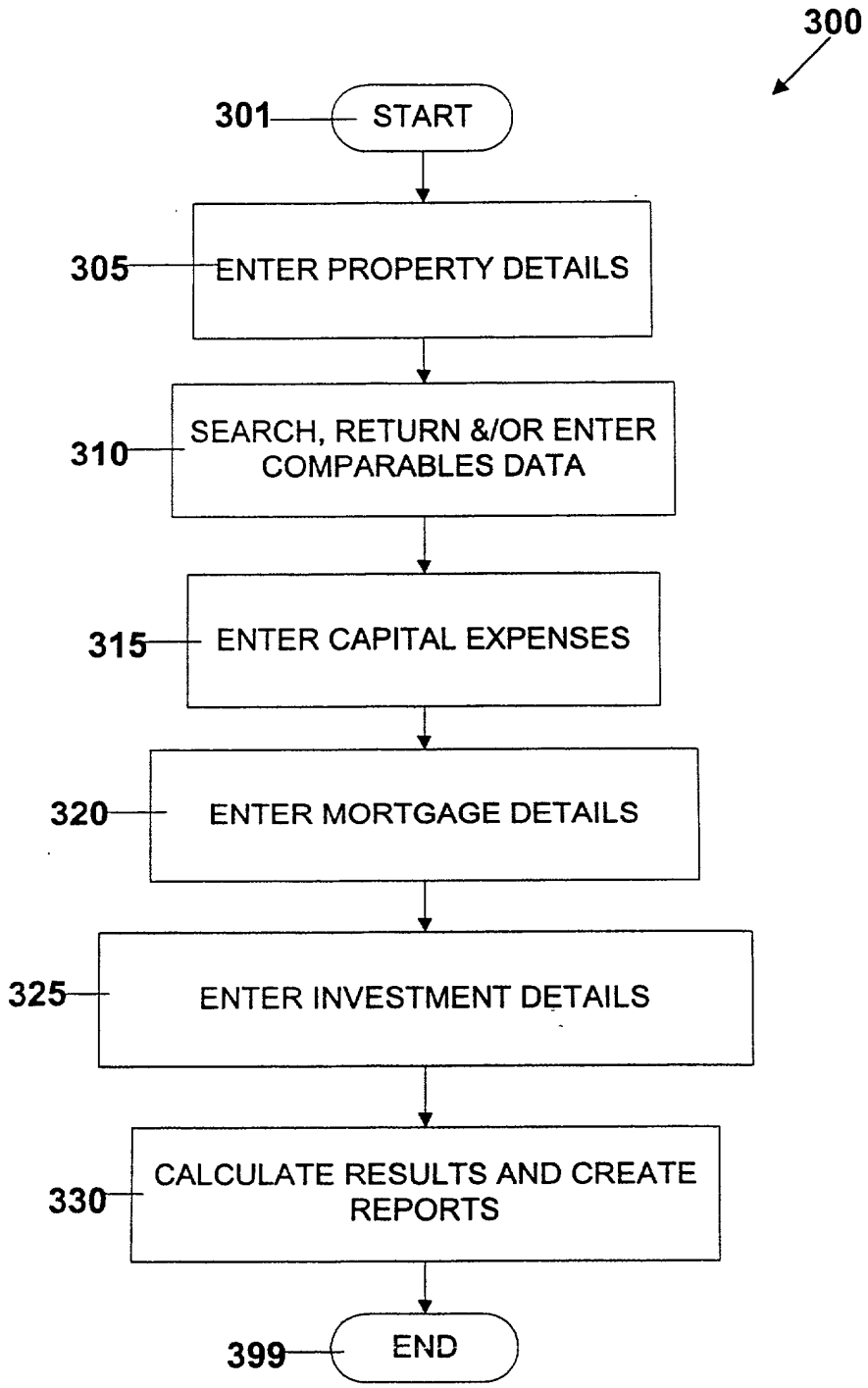

300
301
START
305
ENTER PROPERTY DETAILS
310
SEARCH, RETURN &/OR ENTER COMPARABLES DATA
315
ENTER CAPITAL EXPENSES
320
ENTER MORTGAGE DETAILS
325
ENTER INVESTMENT DETAILS
330
CALCULATE RESULTS AND CREATE REPORTS
399
END

FIG. 4

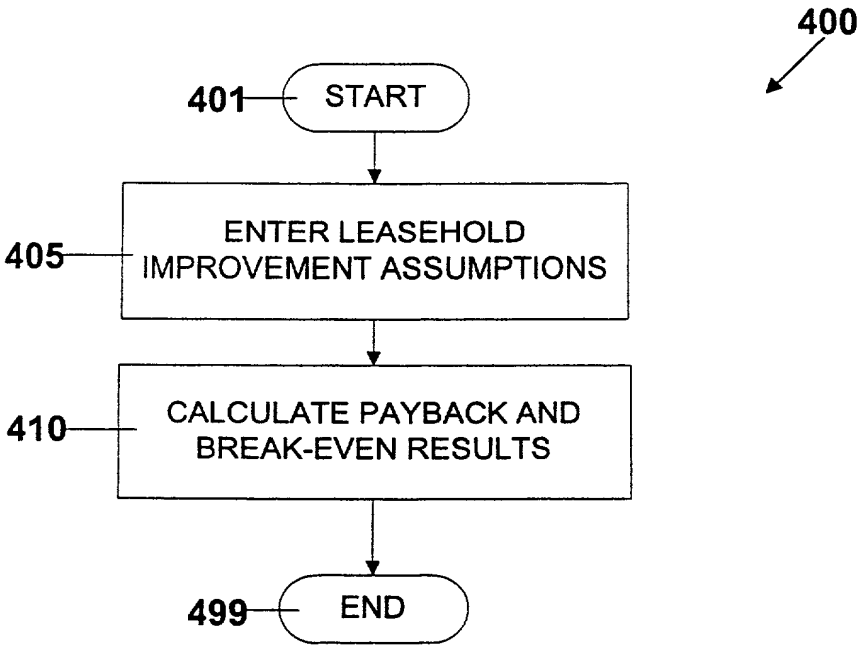

400
401
START
405
ENTER LEASEHOLD IMPROVEMENT ASSUMPTIONS
410
CALCULATE PAYBACK AND BREAK-EVEN RESULTS
499
END

FIG. 5

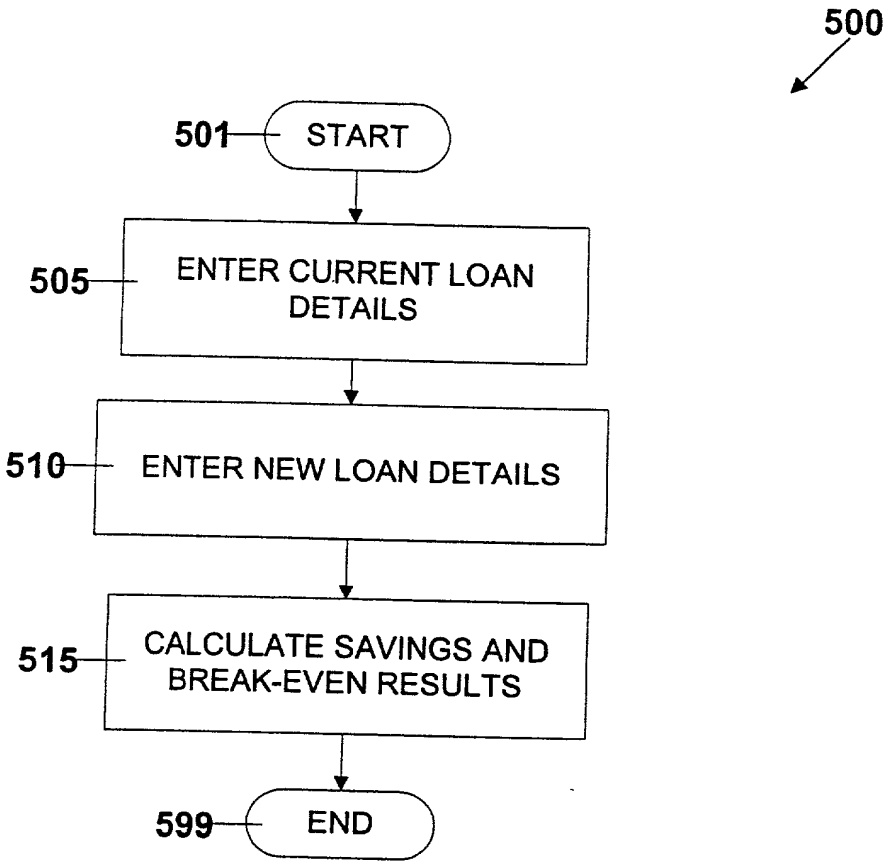

500
501
START
505
ENTER CURRENT LOAN DETAILS
510
ENTER NEW LOAN DETAILS
515
CALCULATE SAVINGS AND BREAK-EVEN RESULTS
599
END

FIG. 6

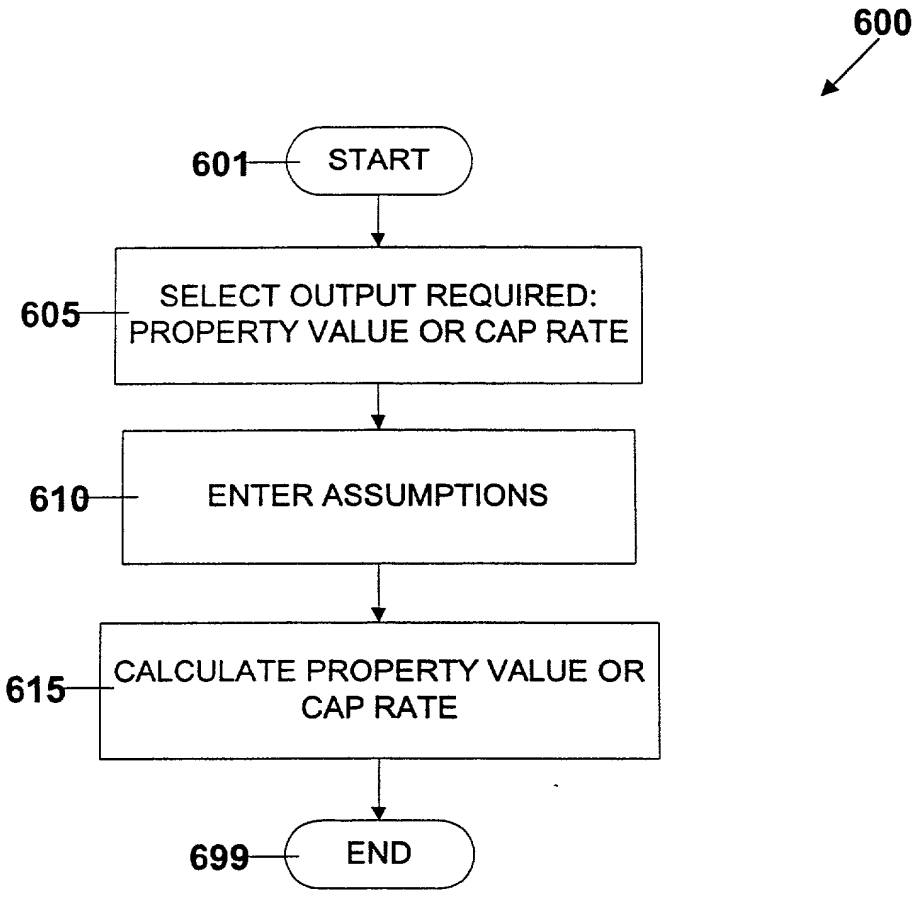

600
601
START
605
SELECT OUTPUT REQUIRED: PROPERTY VALUE OR CAP RATE
610
ENTER ASSUMPTIONS
615
CALCULATE PROPERTY VALUE OR CAP RATE
699
END

FIG. 7

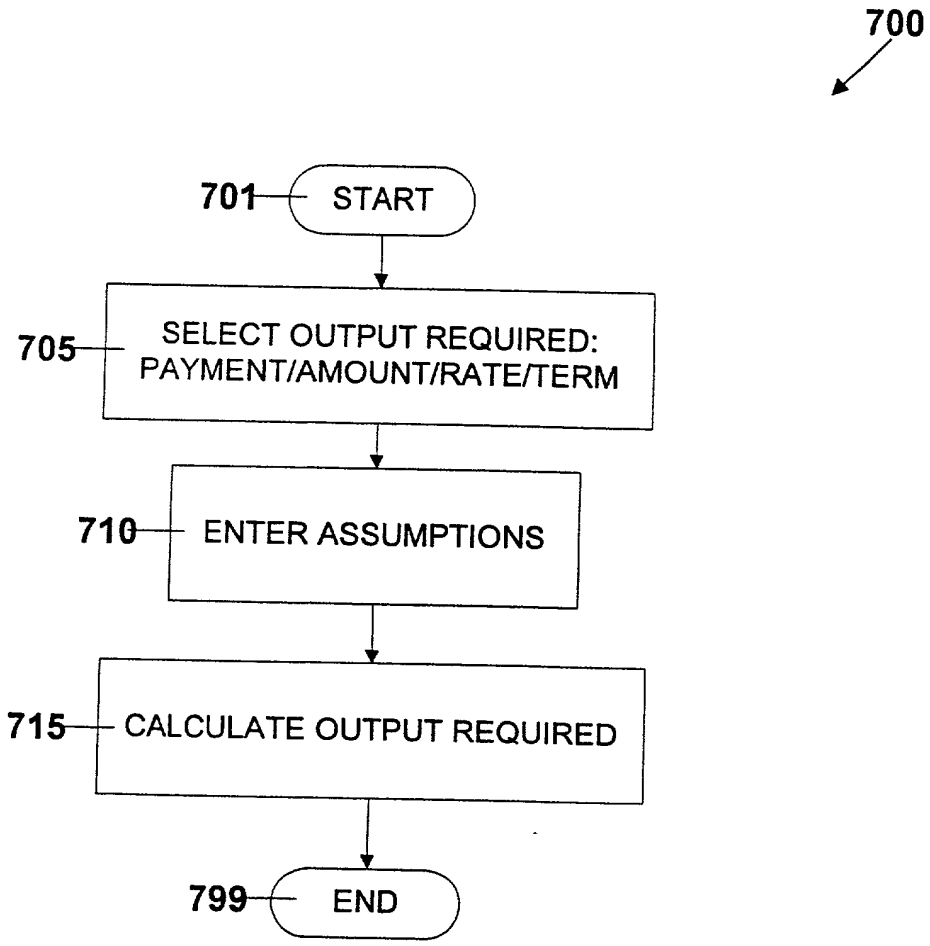

700
701
START
705
SELECT OUTPUT REQUIRED:
PAYMENT/AMOUNT/RATE/TERM
710
ENTER ASSUMPTIONS
715
CALCULATE OUTPUT REQUIRED
799
END

FIG. 8

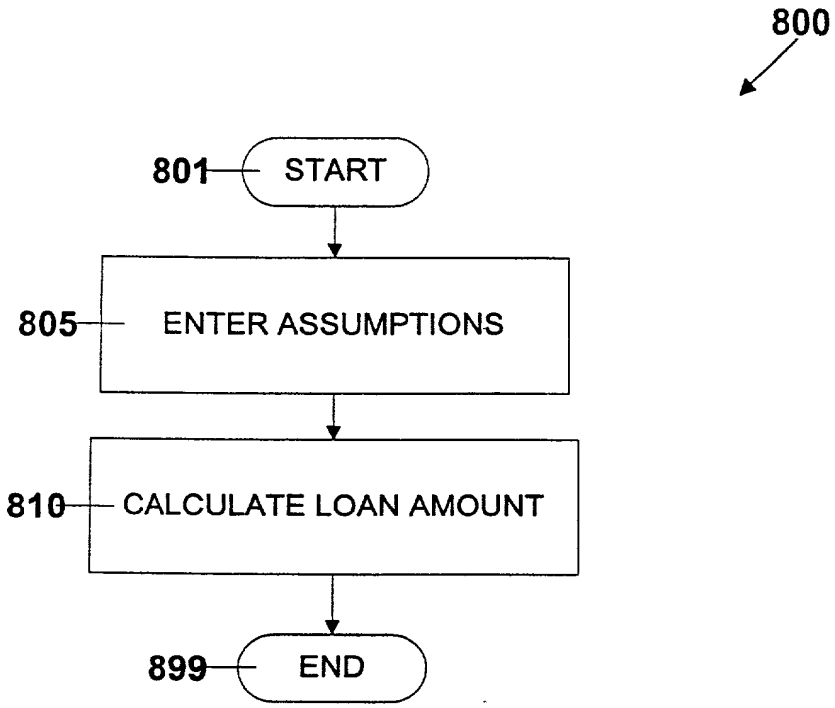
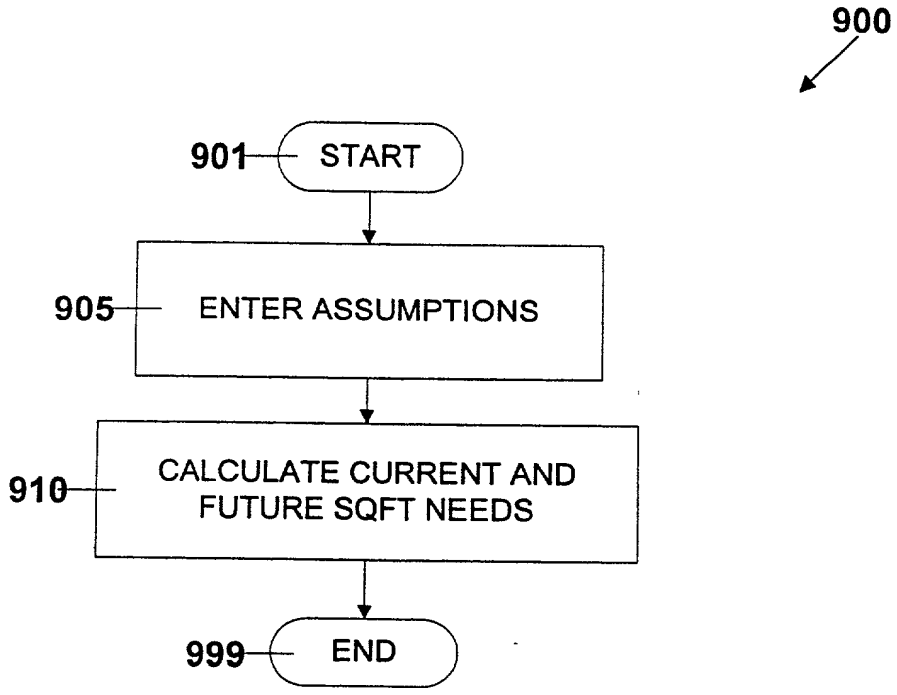
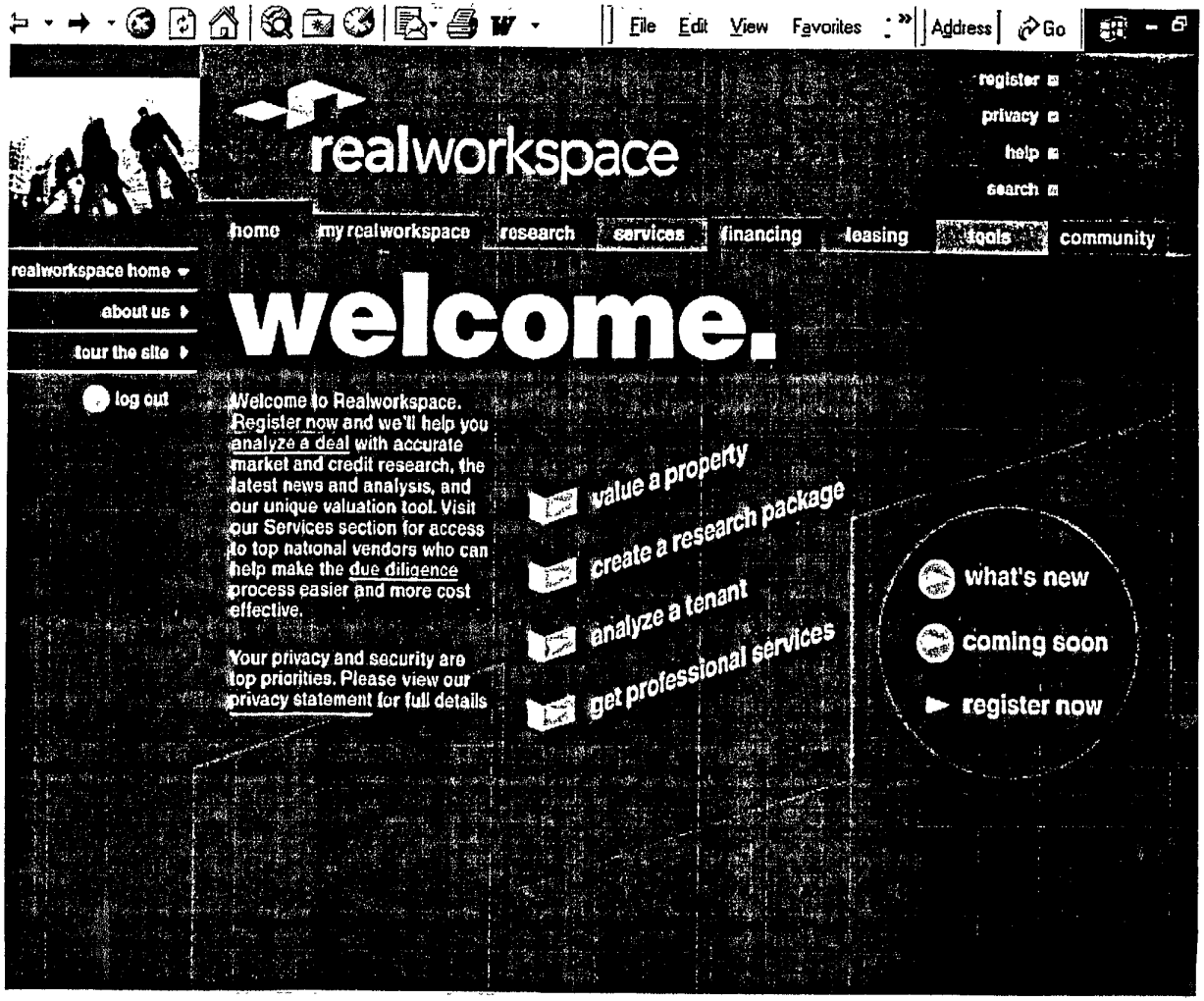

800
801
START
805
ENTER ASSUMPTIONS
810
CALCULATE LOAN AMOUNT
899
END

FIG. 9


900
901
START
905
ENTER ASSUMPTIONS
910
CALCULATE CURRENT AND FUTURE SQFT NEEDS
999
END

1000


File Edit View Favorites Address Go
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privacy
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search
home
my realworkspace
research
services
financing
leasing
tools
community
realworkspace home
about us
tour the site
log out
welcome.
Welcome to Realworkspace. Register now and we'll help you analyze a deal with accurate market and credit research, the latest news and analysis, and our unique valuation tool. Visit our Services section for access to top national vendors who can help make the due diligence process easier and more cost effective.
Your privacy and security are top priorities. Please view our privacy statement for full details
value a property
create a research package
analyze a tenant
get professional services
what's new
coming soon
register now

FIG. 10

FIG. 11

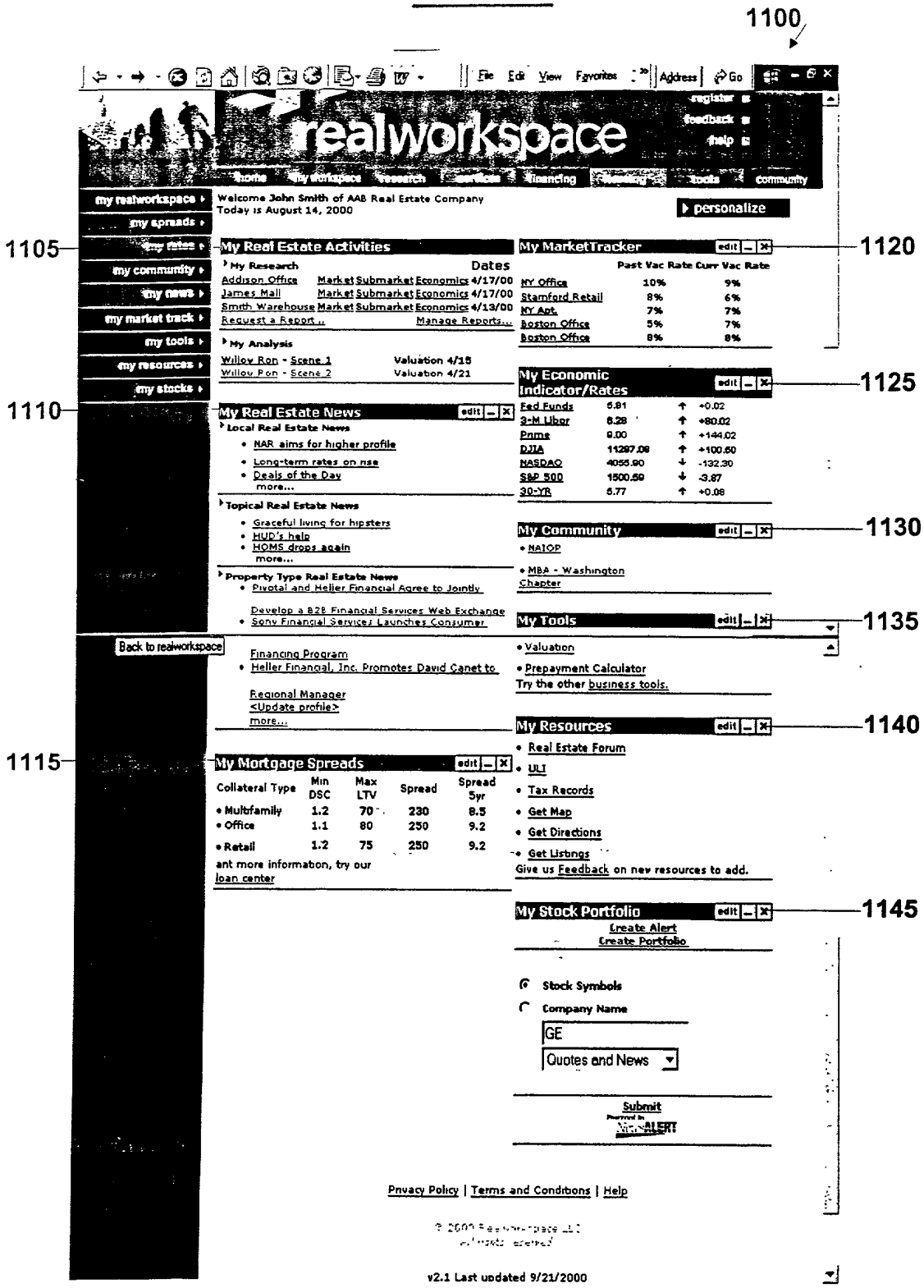
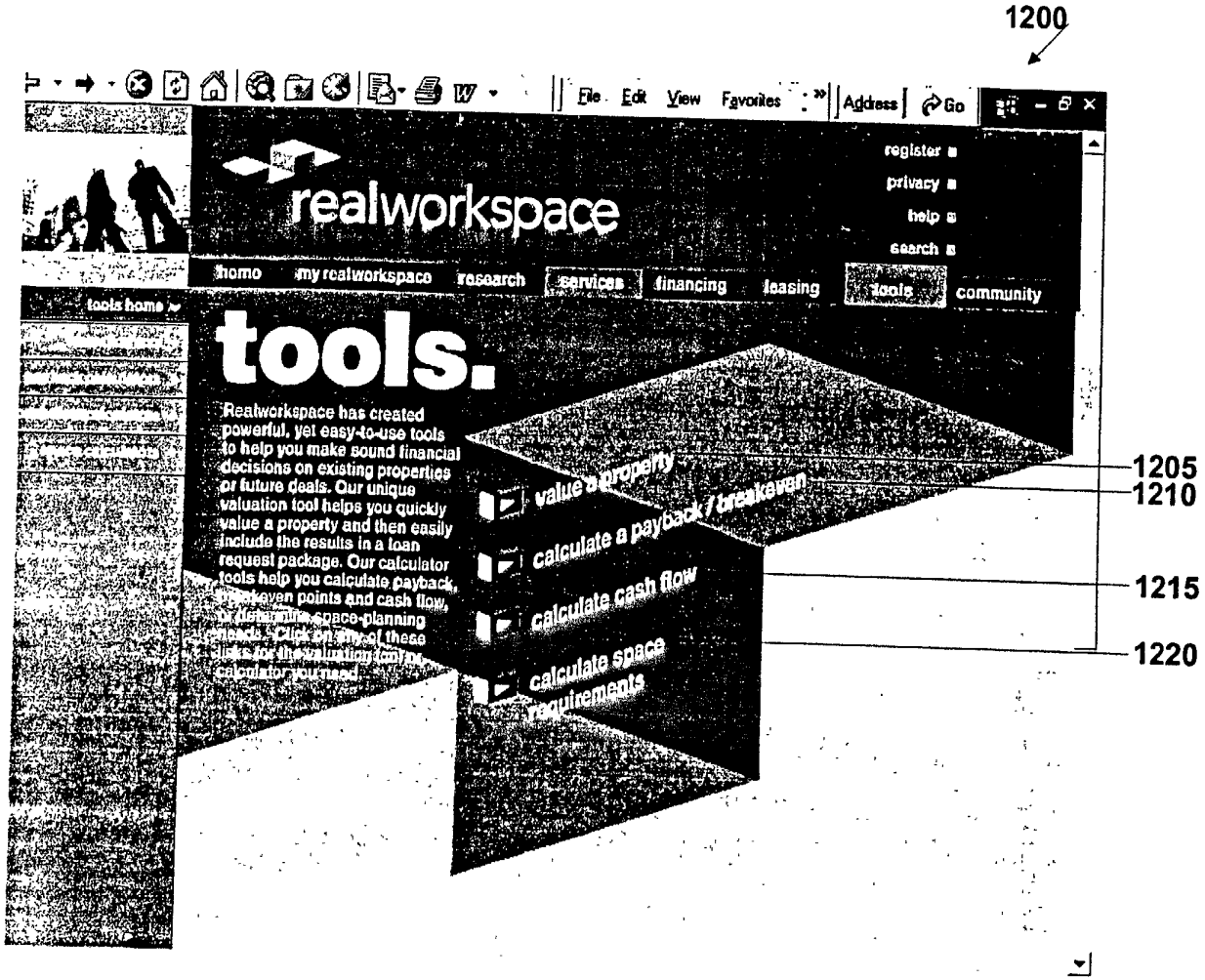

1100
realworkspace
register
feedback
help
Home
My Workspace
Research
Services
Financing
Investing
Tools
Community
my realworkspace
my spreads
my rates
my community
my news
my market track
my tools
my resources
my stocks
Welcome John Smith of AAB Real Estate Company
Today is August 14, 2000
personalize
1105
My Real Estate Activities
My Research
Dates
Addison Office Market Submarket Economics 4/17/00
James Mall Market Submarket Economics 4/17/00
Smith Warehouse Market Submarket Economics 4/13/00
Request a Report...
Manage Reports...
My Analysis
Willow Ron - Scene 1
Valuation 4/18
Willow Ron - Scene 2
Valuation 4/21
1120
My MarketTracker
edit
Past Vac Rate
Curr Vac Rate
NY Office 10% 9%
Stamford Retail 8% 6%
NY Apt. 7% 7%
Boston Office 5% 7%
Boston Office 8% 8%
1125
My Economic Indicator/Rates
edit
Fed Funds 6.81 +0.02
3-M Libor 6.28 +80.02
Prime 9.00 +144.02
DJIA 11297.08 +100.60
NASDAQ 4055.90 -132.30
S&P 500 1500.59 -3.87
30-YR 6.77 +0.08
1110
My Real Estate News
edit
Local Real Estate News
NAR aims for higher profile
Long-term rates on rise
Deals of the Day
more...
Topical Real Estate News
Graceful living for hipsters
HUD's help
HOMS drops again
more...
Property Type Real Estate News
Pivotal and Heller Financial Agree to Jointly
Develop a B2B Financial Services Web Exchange
Sony Financial Services Launches Consumer
Financing Program
Heller Financial, Inc. Promotes David Canet to
Regional Manager
<Update profile>
more...
1130
My Community
edit
NAIOP
MBA - Washington Chapter
1135
My Tools
edit
Valuation
Prepayment Calculator
Try the other business tools.
Back to realworkspace
1115
My Mortgage Spreads
edit
Collateral Type | Min DSC | Max LTV | Spread | Spread 5yr
Multifamily 1.2 70 230 8.5
Office 1.1 80 250 9.2
Retail 1.2 75 250 9.2
ant more information, try our
loan center
1140
My Resources
edit
Real Estate Forum
ULI
Tax Records
Get Map
Get Directions
Get Listings
Give us Feedback on new resources to add.
1145
My Stock Portfolio
edit
Create Alert
Create Portfolio
Stock Symbols
Company Name
GE
Quotes and News
Submit
Privacy Policy | Terms and Conditions | Help
v2.1 Last updated 9/21/2000

FIG. 12


1200
File Edit View Favorites
Address
Go
realworkspace
register
privacy
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search
home
my realworkspace
research
services
financing
leasing
tools
community
tools home
tools.
Realworkspace has created powerful, yet easy-to-use tools to help you make sound financial decisions on existing properties or future deals. Our unique valuation tool helps you quickly value a property and then easily include the results in a loan request package. Our calculator tools help you calculate payback, breakeven points and cash flow, or determine space-planning needs. Click on one of these tools for the calculator you need.
value a property
calculate a payback / breakeven
calculate cash flow
calculate space requirements
1205
1210
1215
1220

FIG. 13

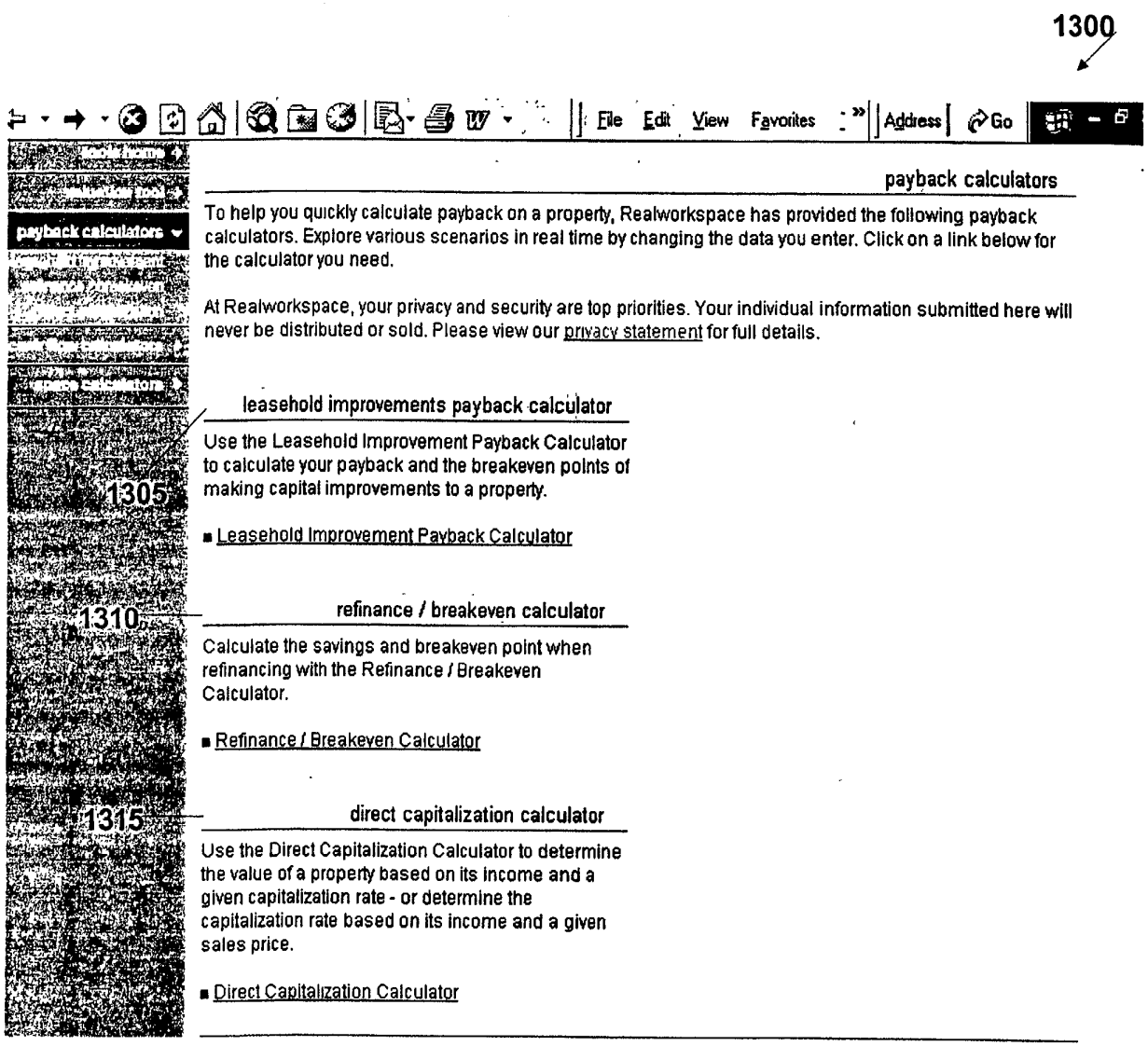
1300
File Edit View Favorites
Address
Go
payback calculators
payback calculators
To help you quickly calculate payback on a property, Realworkspace has provided the following payback calculators. Explore various scenarios in real time by changing the data you enter. Click on a link below for the calculator you need.
At Realworkspace, your privacy and security are top priorities. Your individual information submitted here will never be distributed or sold. Please view our privacy statement for full details.
1305
leasehold improvements payback calculator
Use the Leasehold Improvement Payback Calculator to calculate your payback and the breakeven points of making capital improvements to a property.
Leasehold Improvement Payback Calculator
1310
refinance / breakeven calculator
Calculate the savings and breakeven point when refinancing with the Refinance / Breakeven Calculator.
Refinance / Breakeven Calculator
1315
direct capitalization calculator
Use the Direct Capitalization Calculator to determine the value of a property based on its income and a given capitalization rate - or determine the capitalization rate based on its income and a given sales price.
Direct Capitalization Calculator

FIG. 14

1400
File Edit View Favorites Address Go
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help
search
home
my realworkspace
research
services
financing
leasing
tools
community
cash flow calculators
1405
1410
cash flow calculators
To help you calculate cash flow on a property, Realworkspace has created the following mortgage and affordability calculators. Explore various scenarios in real-time by changing the data you enter. Click on a link below for the calculator you need.
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mortgage calculator
The Mortgage Calculator will help you quickly calculate mortgage payments on a fixed or variable commercial loan, as well as the principal and interest payments over the term of a loan.
Mortgage Calculator
affordability calculator
The Affordability Calculator will help you determine the size of the commercial real estate loan you can afford by calculating the loan amount based on Net Operating Income (NOI) and basic underwriting criteria.
Affordability Calculator

15a00

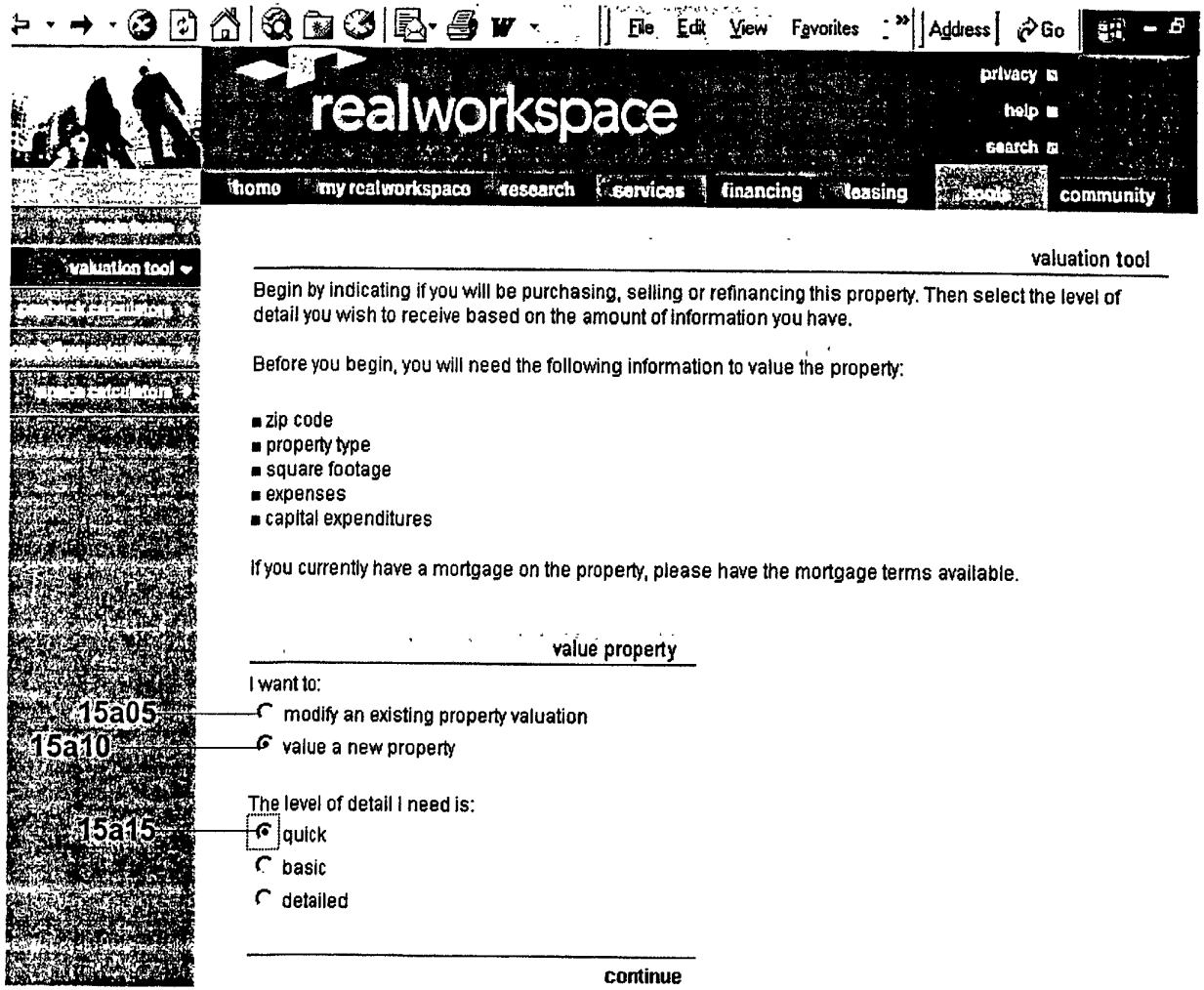
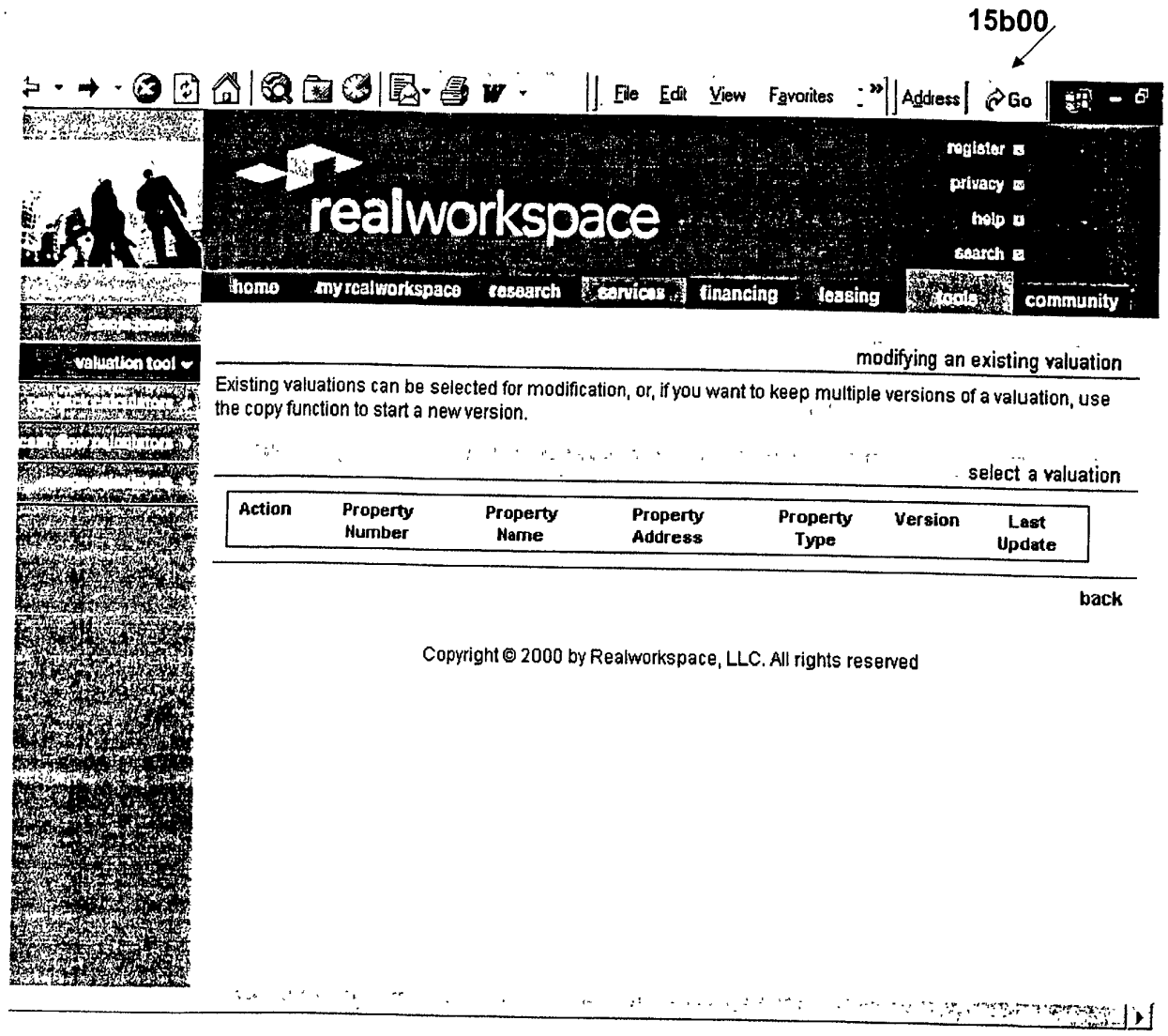


FIG. 15a

FIG. 15b


15b00
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privacy
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search
home
my realworkspace
research
services
financing
leasing
tools
community
valuation tool
modifying an existing valuation
Existing valuations can be selected for modification, or, if you want to keep multiple versions of a valuation, use the copy function to start a new version.
select a valuation
Action
Property Number
Property Name
Property Address
Property Type
Version
Last Update
back
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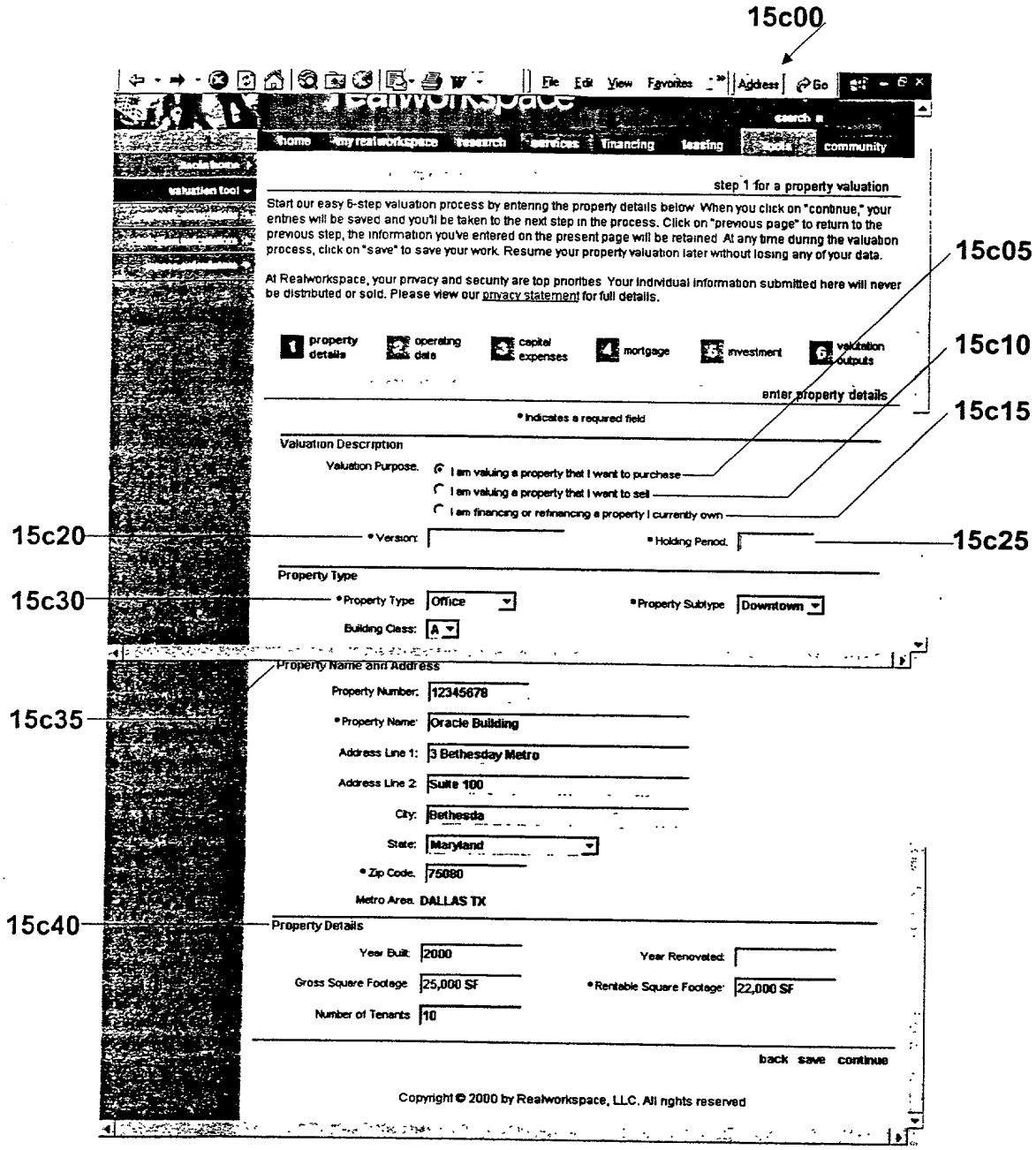
FIG. 15c


15c00
15c05
15c10
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15c20
15c25
15c30
15c35
15c40
File Edit View Favorites Address Go
Realworkspace
search
home
my realworkspace
research
services
financing
leasing
tools
community
valuation tool
step 1 for a property valuation
Start our easy 6-step valuation process by entering the property details below. When you click on "continue," your entries will be saved and you'll be taken to the next step in the process. Click on "previous page" to return to the previous step, the information you've entered on the present page will be retained. At any time during the valuation process, click on "save" to save your work. Resume your property valuation later without losing any of your data.
At Realworkspace, your privacy and security are top priorities. Your individual information submitted here will never be distributed or sold. Please view our privacy statement for full details.
1 property details
2 operating data
3 capital expenses
4 mortgage
5 investment
6 valuation outputs
enter property details
* indicates a required field
Valuation Description
Valuation Purpose:
I am valuing a property that I want to purchase
I am valuing a property that I want to sell
I am financing or refinancing a property I currently own
* Version:
* Holding Period:
Property Type
* Property Type: Office
* Property Subtype: Downtown
Building Class: A
Property Name and Address
Property Number: 12345678
* Property Name: Oracle Building
Address Line 1: 3 Bethesday Metro
Address Line 2: Suite 100
City: Bethesda
State: Maryland
* Zip Code: 75080
Metro Area: DALLAS TX
Property Details
Year Built: 2000
Year Renovated:
Gross Square Footage: 25,000 SF
* Rentable Square Footage: 22,000 SF
Number of Tenants: 10
back save continue
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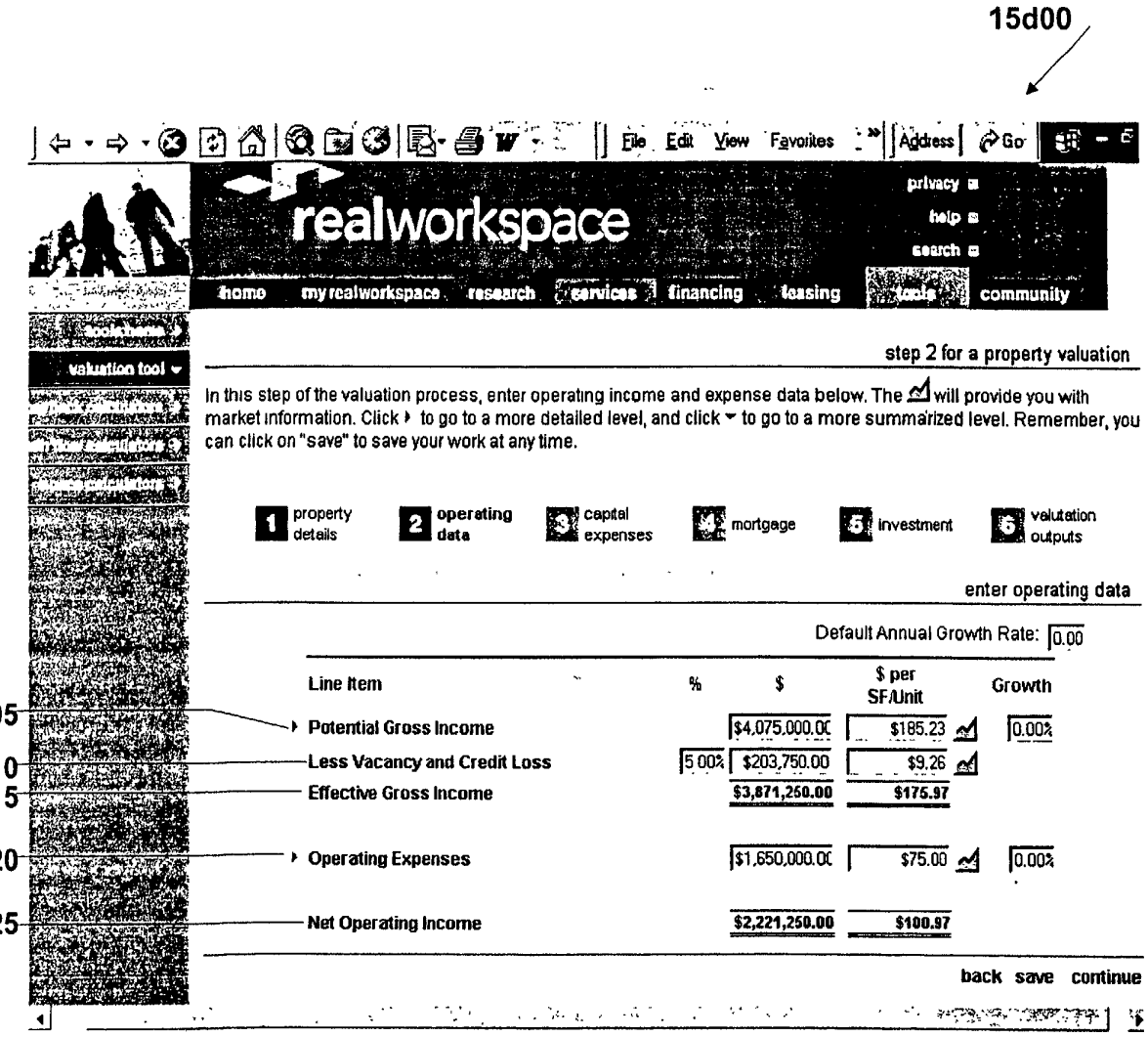
FIG. 15d


15d00
File Edit View Favorites Address Go
realworkspace
privacy
help
search
home
my realworkspace
research
services
financing
leasing
tools
community
valuation tool
step 2 for a property valuation
In this step of the valuation process, enter operating income and expense data below. The will provide you with market information. Click to go to a more detailed level, and click to go to a more summarized level. Remember, you can click on "save" to save your work at any time.
1 property details
2 operating data
3 capital expenses
4 mortgage
5 investment
6 valuation outputs
enter operating data
Default Annual Growth Rate: 0.00
Line Item
%
$
$ per SF/Unit
Growth
5d05
Potential Gross Income
$4,075,000.00
$185.23
0.00%
5d10
Less Vacancy and Credit Loss
5.00%
$203,750.00
$9.26
5d15
Effective Gross Income
$3,871,250.00
$175.97
5d20
Operating Expenses
$1,650,000.00
$75.00
0.00%
5d25
Net Operating Income
$2,221,250.00
$100.97
back save continue

15e00

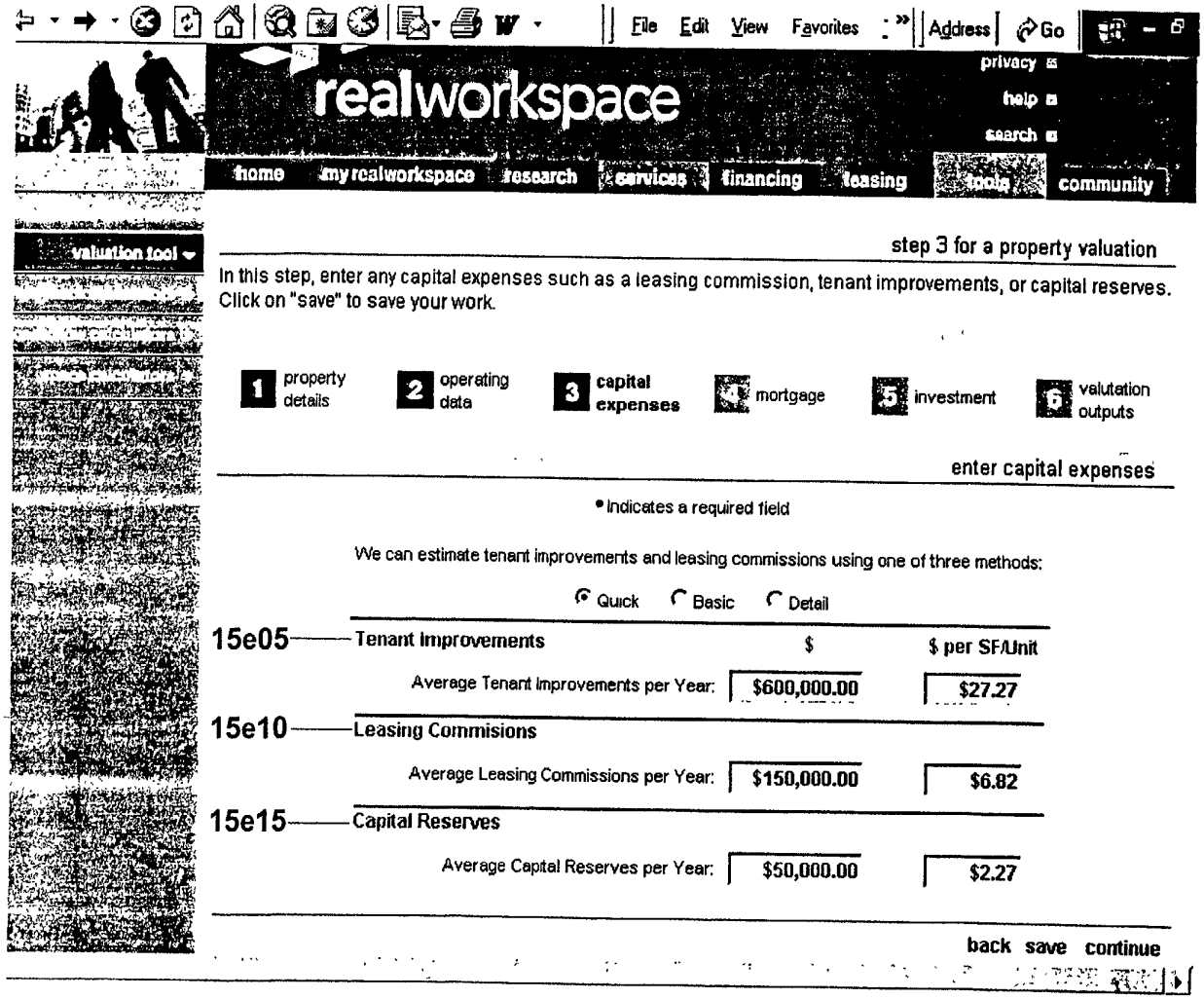


FIG. 15e

FIG. 15f

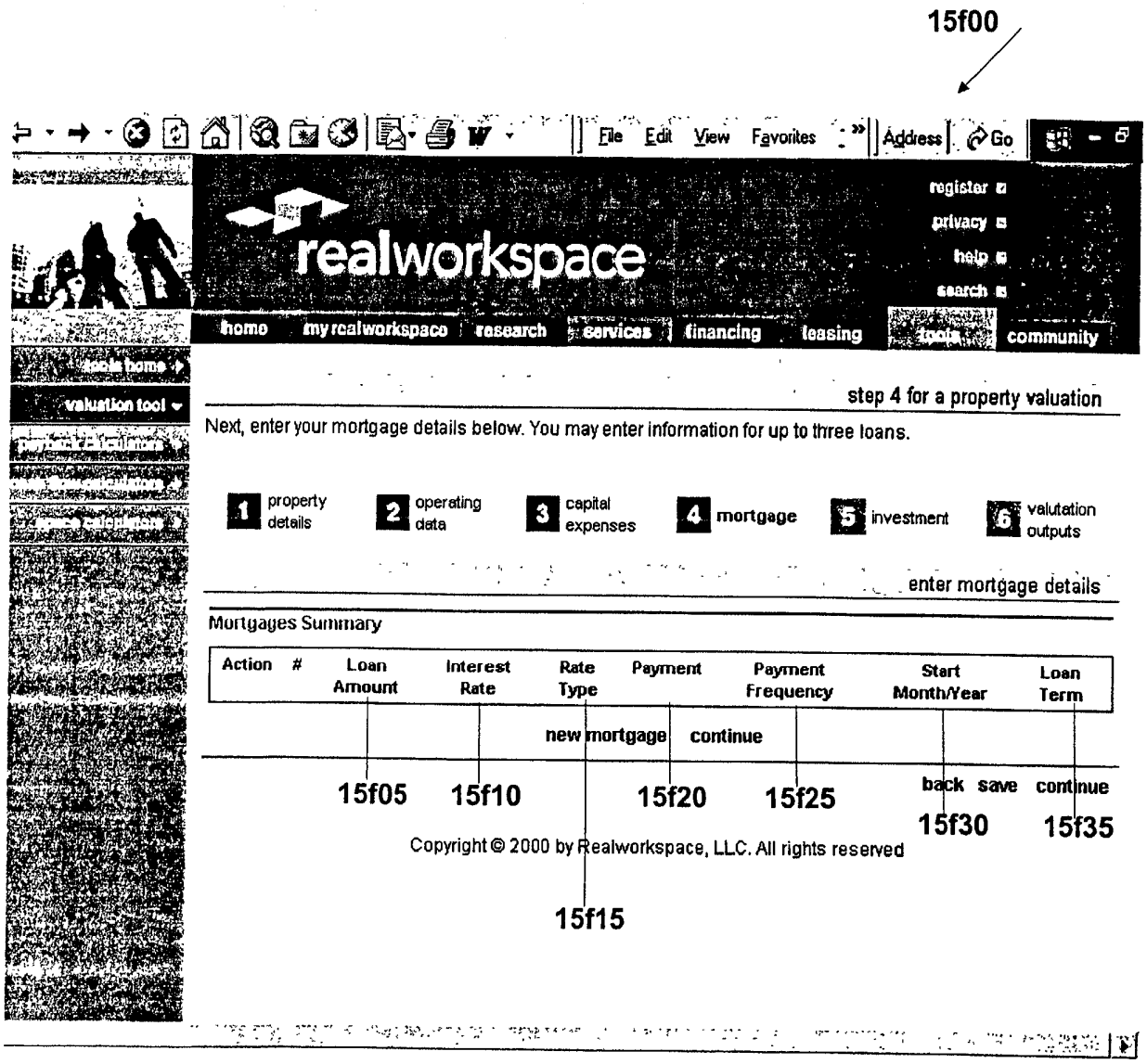

15f00
File Edit View Favorites Address Go
realworkspace
register
privacy
help
search
home
my realworkspace
research
services
financing
leasing
tools
community
valuation tool
step 4 for a property valuation
Next, enter your mortgage details below. You may enter information for up to three loans.
1 property details
2 operating data
3 capital expenses
4 mortgage
5 investment
6 valutation outputs
enter mortgage details
Mortgages Summary
Action
#
Loan Amount
Interest Rate
Rate Type
Payment
Payment Frequency
Start Month/Year
Loan Term
new mortgage
continue
back
save
continue
15f05
15f10
15f15
15f20
15f25
15f30
15f35
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FIG. 15g

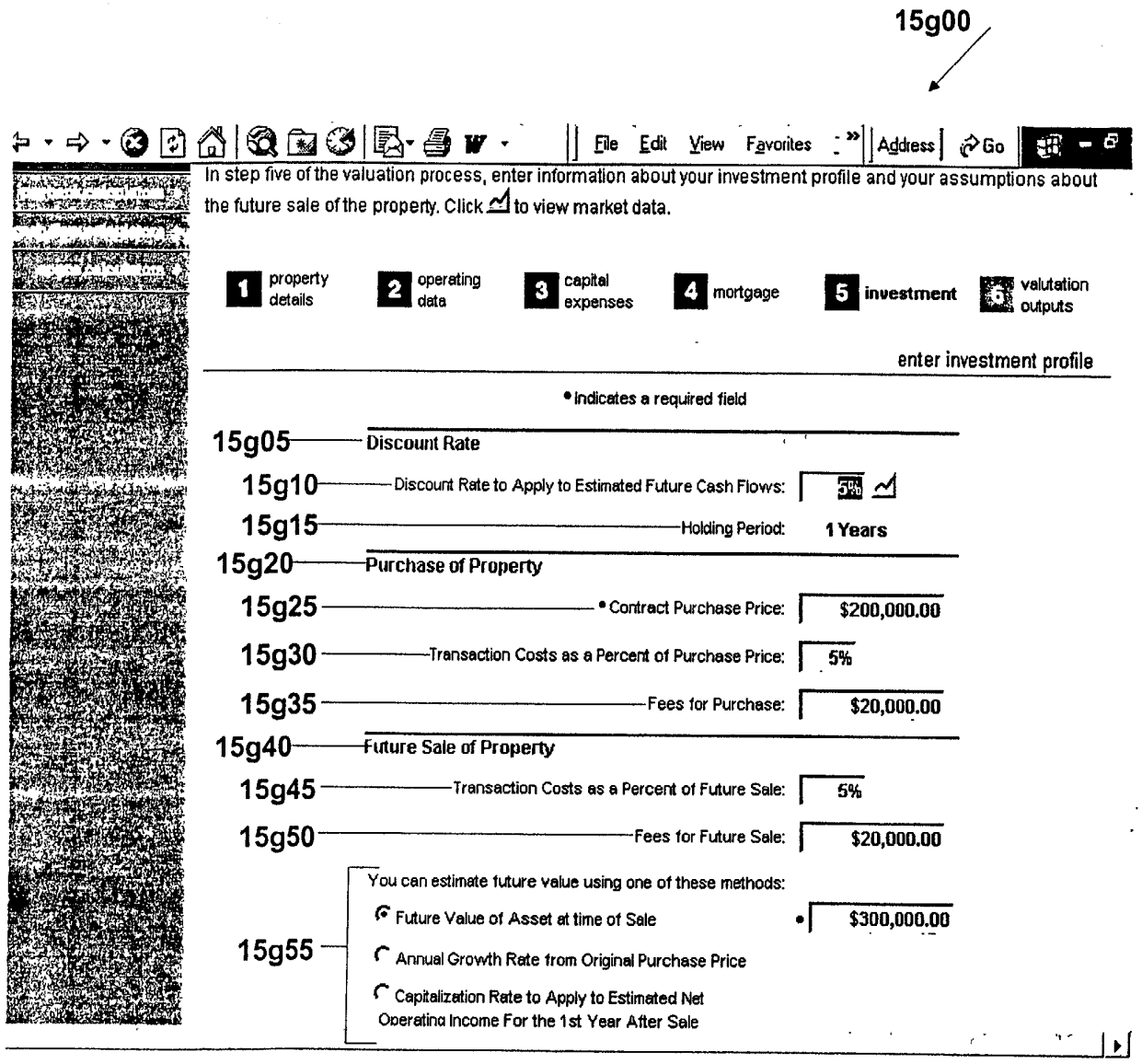

15g00
File Edit View Favorites Address Go
In step five of the valuation process, enter information about your investment profile and your assumptions about the future sale of the property. Click to view market data.
1 property details
2 operating data
3 capital expenses
4 mortgage
5 investment
6 valutation outputs
enter investment profile
• indicates a required field
15g05 Discount Rate
15g10 Discount Rate to Apply to Estimated Future Cash Flows: 5%
15g15 Holding Period: 1 Years
15g20 Purchase of Property
15g25 • Contract Purchase Price: $200,000.00
15g30 Transaction Costs as a Percent of Purchase Price: 5%
15g35 Fees for Purchase: $20,000.00
15g40 Future Sale of Property
15g45 Transaction Costs as a Percent of Future Sale: 5%
15g50 Fees for Future Sale: $20,000.00
15g55 You can estimate future value using one of these methods:
Future Value of Asset at time of Sale • $300,000.00
Annual Growth Rate from Original Purchase Price
Capitalization Rate to Apply to Estimated Net Operating Income For the 1st Year After Sale

FIG. 15h

15h00

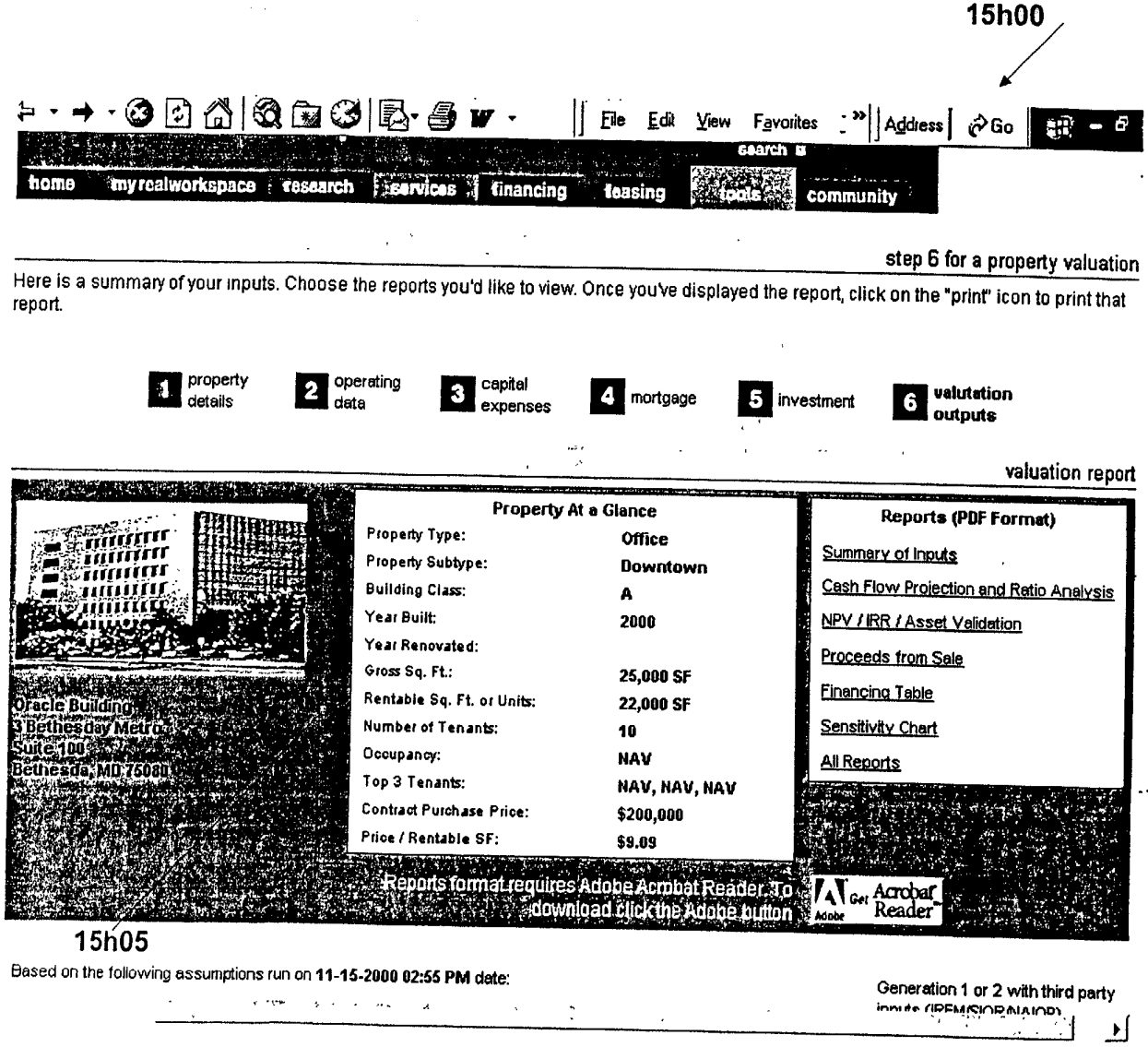


FIG. 15h (cont.)

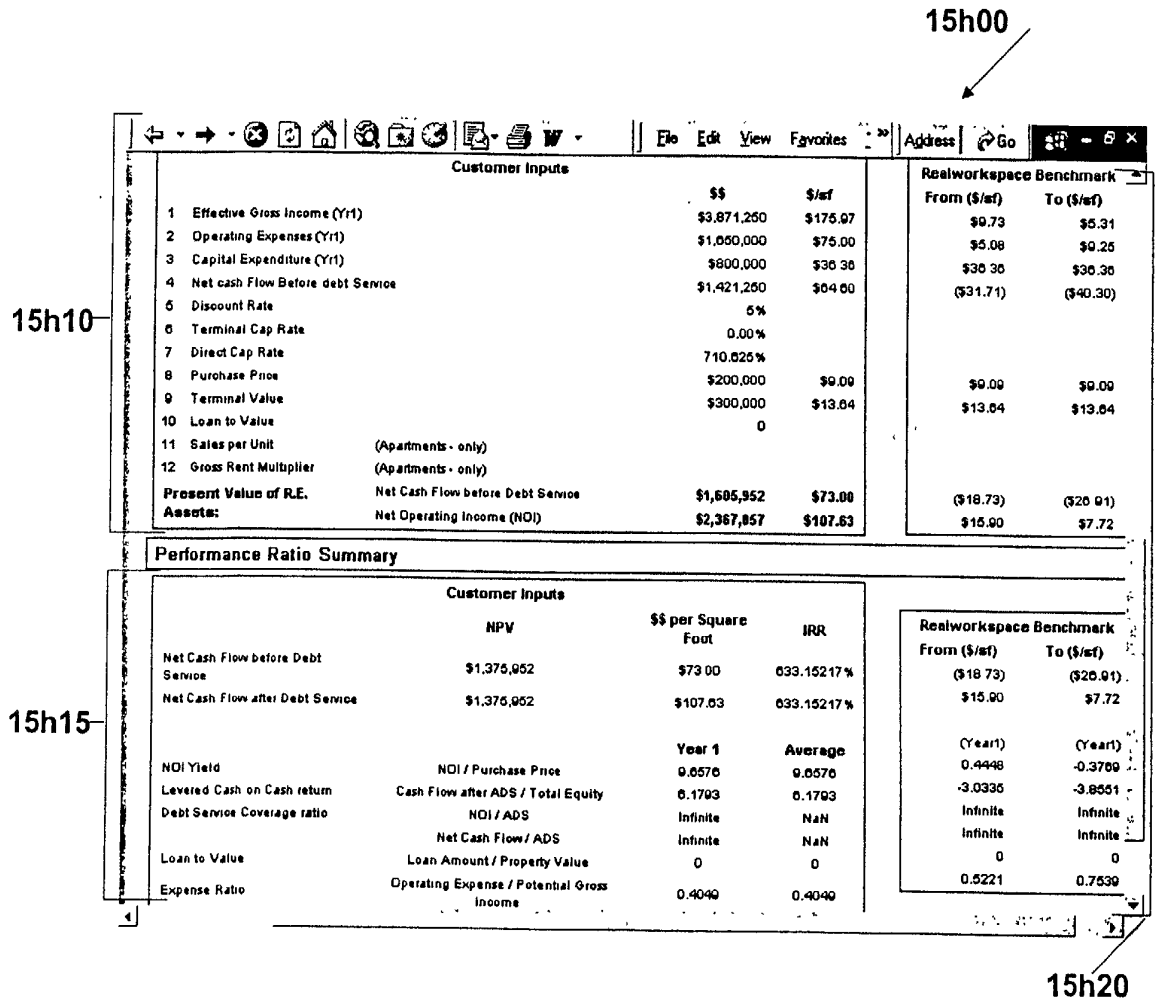
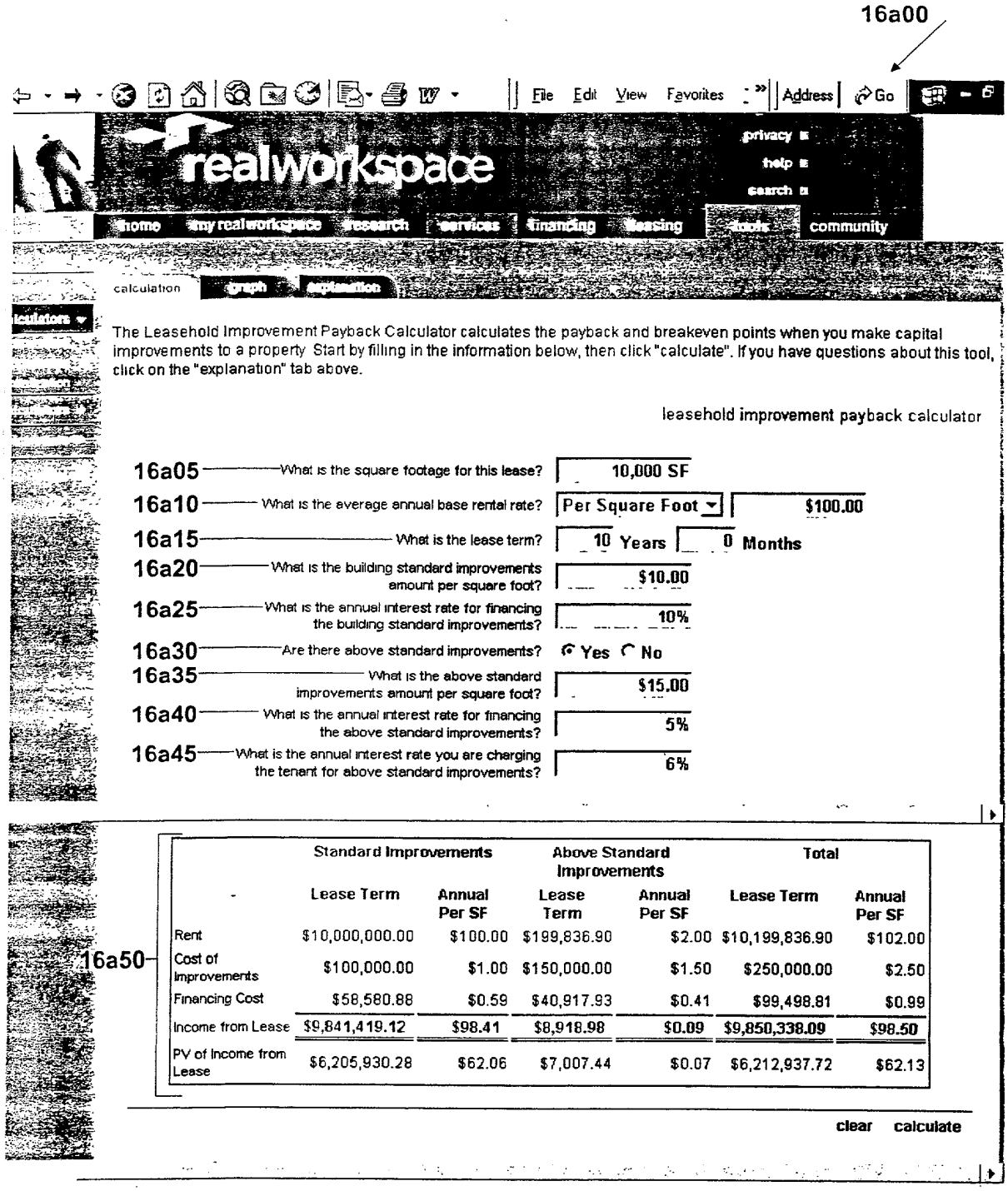
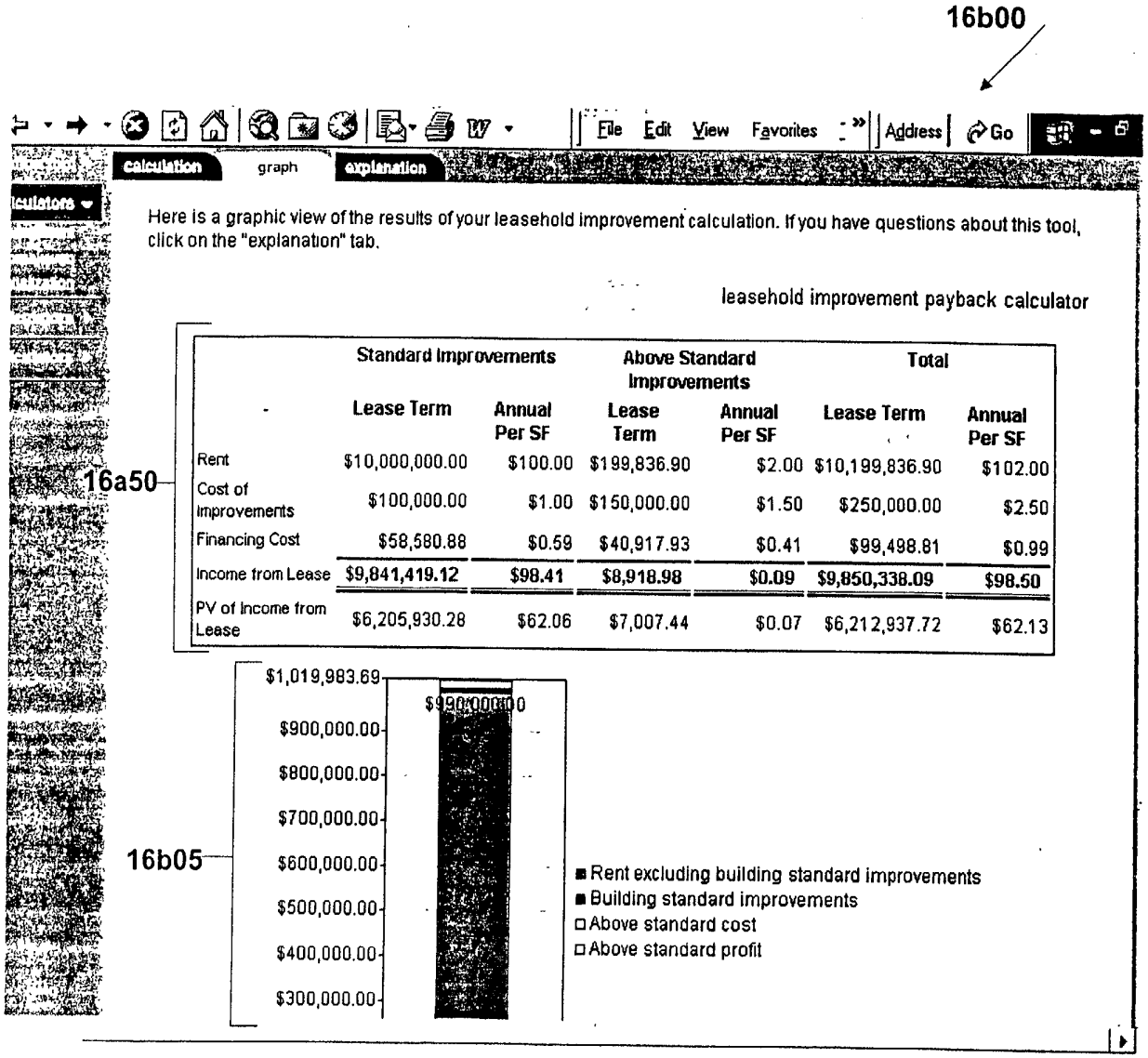

15h00
15h10
15h15
15h20
File Edit View Favorites Address Go
Customer Inputs
Realworkspace Benchmark
$$ $/sf From ($/sf) To ($/sf)
1 Effective Gross Income (Yr1) $3,871,250 $175.97 $9.73 $5.31
2 Operating Expenses (Yr1) $1,650,000 $75.00 $5.08 $9.26
3 Capital Expenditure (Yr1) $800,000 $36.36 $36.36 $36.36
4 Net cash Flow Before debt Service $1,421,250 $64.60 ($31.71) ($40.30)
5 Discount Rate 5%
6 Terminal Cap Rate 0.00%
7 Direct Cap Rate 710.625%
8 Purchase Price $200,000 $9.09 $9.09 $9.09
9 Terminal Value $300,000 $13.64 $13.64 $13.64
10 Loan to Value 0
11 Sales per Unit (Apartments - only)
12 Gross Rent Multiplier (Apartments - only)
Present Value of R.E. Assets: Net Cash Flow before Debt Service $1,605,952 $73.00 ($18.73) ($26.91)
Net Operating Income (NOI) $2,367,857 $107.63 $15.90 $7.72
Performance Ratio Summary
Customer Inputs
NPV $$ per Square Foot IRR
Net Cash Flow before Debt Service $1,375,952 $73.00 633.15217%
Net Cash Flow after Debt Service $1,375,952 $107.63 633.15217%
Year 1 Average
NOI Yield NOI / Purchase Price 9.6576 9.6576
Levered Cash on Cash return Cash Flow after ADS / Total Equity 6.1793 6.1793
Debt Service Coverage ratio NOI / ADS Infinite NaN
Net Cash Flow / ADS Infinite NaN
Loan to Value Loan Amount / Property Value 0 0
Expense Ratio Operating Expense / Potential Gross Income 0.4049 0.4049
Realworkspace Benchmark
From ($/sf) To ($/sf)
($18.73) ($26.91)
$15.90 $7.72
(Year1) (Year1)
0.4448 -0.3769
-3.0336 -3.8551
Infinite Infinite
Infinite Infinite
0 0
0.5221 0.7539

FIG. 16a



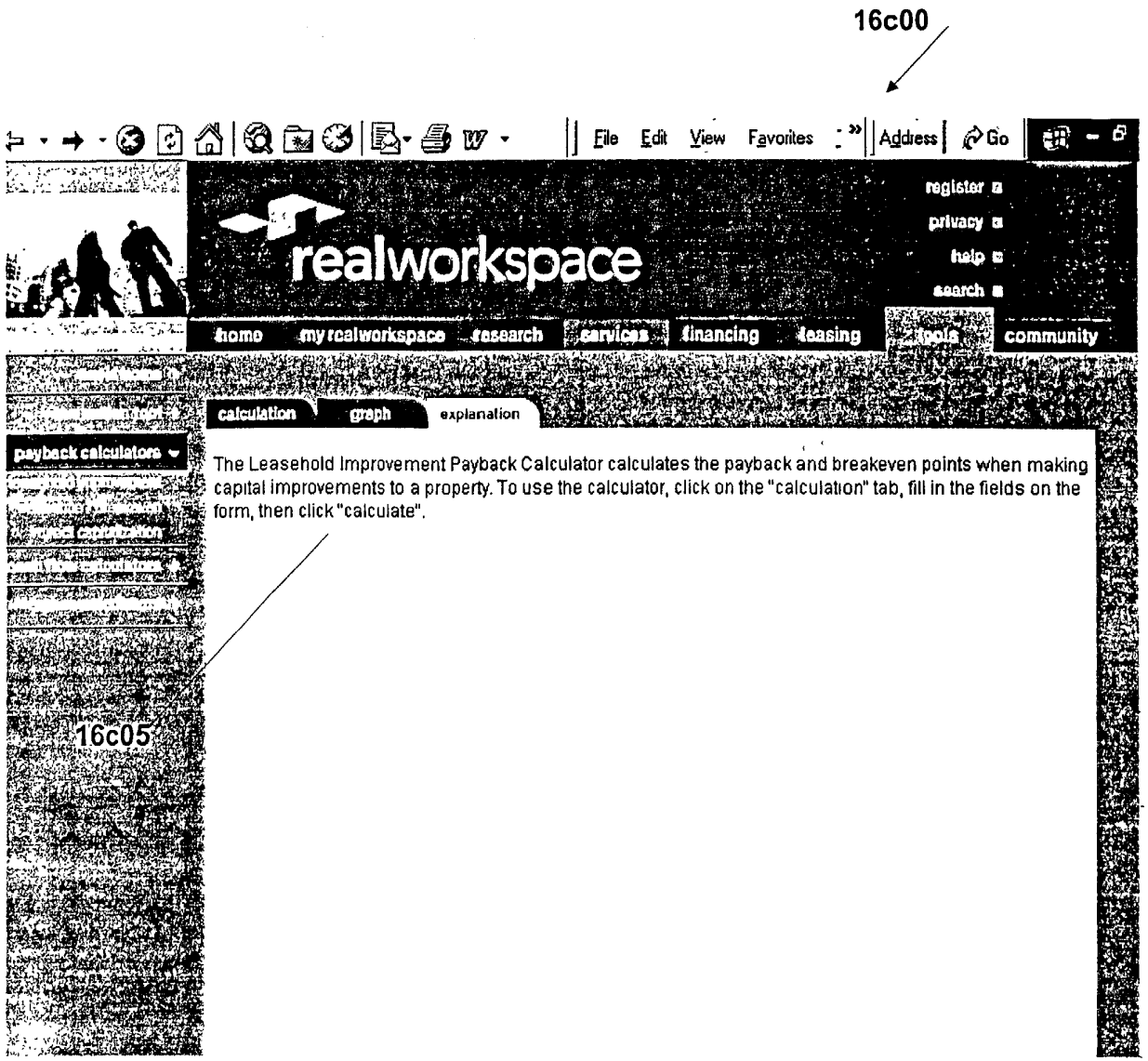
	Standard Improvements		Above Standard Improvements		Total	
	Lease Term	Annual Per SF	Lease Term	Annual Per SF	Lease Term	Annual Per SF
Rent	$10,000,000.00	$100.00	$199,836.90	$2.00	$10,199,836.90	$102.00
Cost of Improvements	$100,000.00	$1.00	$150,000.00	$1.50	$250,000.00	$2.50
Financing Cost	$58,580.88	$0.59	$40,917.93	$0.41	$99,498.81	$0.99
Income from Lease	$9,841,419.12	$98.41	$8,918.98	$0.09	$9,850,338.09	$98.50
PV of Income from Lease	$6,205,930.28	$62.06	$7,007.44	$0.07	$6,212,937.72	$62.13

FIG. 16b



	Standard Improvements		Above Standard Improvements		Total	
	Lease Term	Annual Per SF	Lease Term	Annual Per SF	Lease Term	Annual Per SF
Rent	$10,000,000.00	$100.00	$199,836.90	$2.00	$10,199,836.90	$102.00
Cost of improvements	$100,000.00	$1.00	$150,000.00	$1.50	$250,000.00	$2.50
Financing Cost	$58,580.88	$0.59	$40,917.93	$0.41	$99,498.81	$0.99
Income from Lease	$9,841,419.12	$98.41	$8,918.98	$0.09	$9,850,338.09	$98.50
PV of Income from Lease	$6,205,930.28	$62.06	$7,007.44	$0.07	$6,212,937.72	$62.13

FIG. 16c


16c00
File Edit View Favorites Address Go
realworkspace
register
privacy
help
search
home
my realworkspace
research
services
financing
leasing
tools
community
calculation
graph
explanation
payback calculators
The Leasehold Improvement Payback Calculator calculates the payback and breakeven points when making capital improvements to a property. To use the calculator, click on the "calculation" tab, fill in the fields on the form, then click "calculate".
16c05

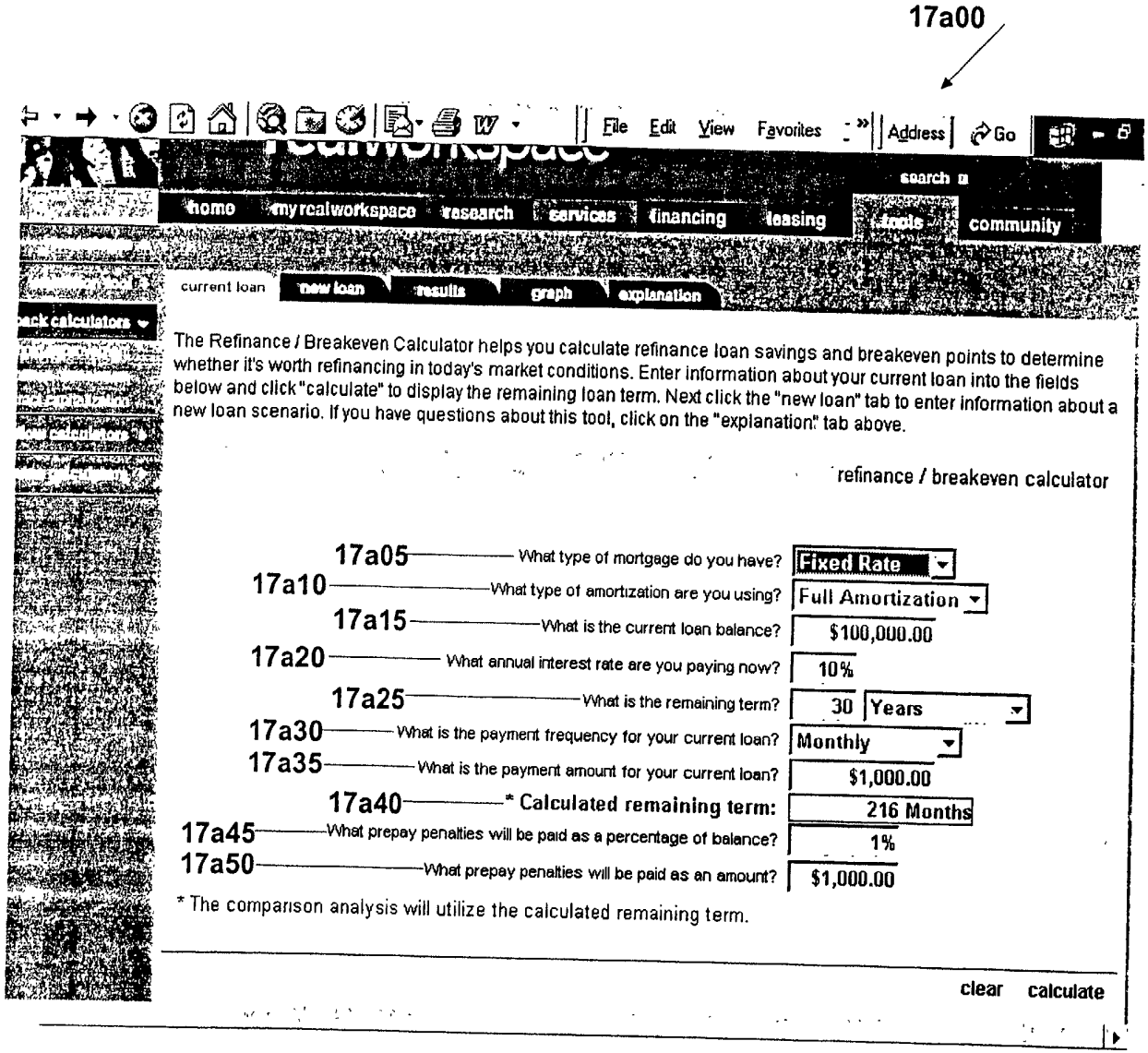

17a00
File Edit View Favorites Address Go
realworkspace
search
home
my realworkspace
research
services
financing
leasing
tools
community
current loan
new loan
results
graph
explanation
The Refinance / Breakeven Calculator helps you calculate refinance loan savings and breakeven points to determine whether it's worth refinancing in today's market conditions. Enter information about your current loan into the fields below and click "calculate" to display the remaining loan term. Next click the "new loan" tab to enter information about a new loan scenario. If you have questions about this tool, click on the "explanation" tab above.
refinance / breakeven calculator
17a05 What type of mortgage do you have? Fixed Rate
17a10 What type of amortization are you using? Full Amortization
17a15 What is the current loan balance? $100,000.00
17a20 What annual interest rate are you paying now? 10%
17a25 What is the remaining term? 30 Years
17a30 What is the payment frequency for your current loan? Monthly
17a35 What is the payment amount for your current loan? $1,000.00
17a40 * Calculated remaining term: 216 Months
17a45 What prepay penalties will be paid as a percentage of balance? 1%
17a50 What prepay penalties will be paid as an amount? $1,000.00
* The comparison analysis will utilize the calculated remaining term.
clear
calculate

FIG. 17a

FIG. 17b

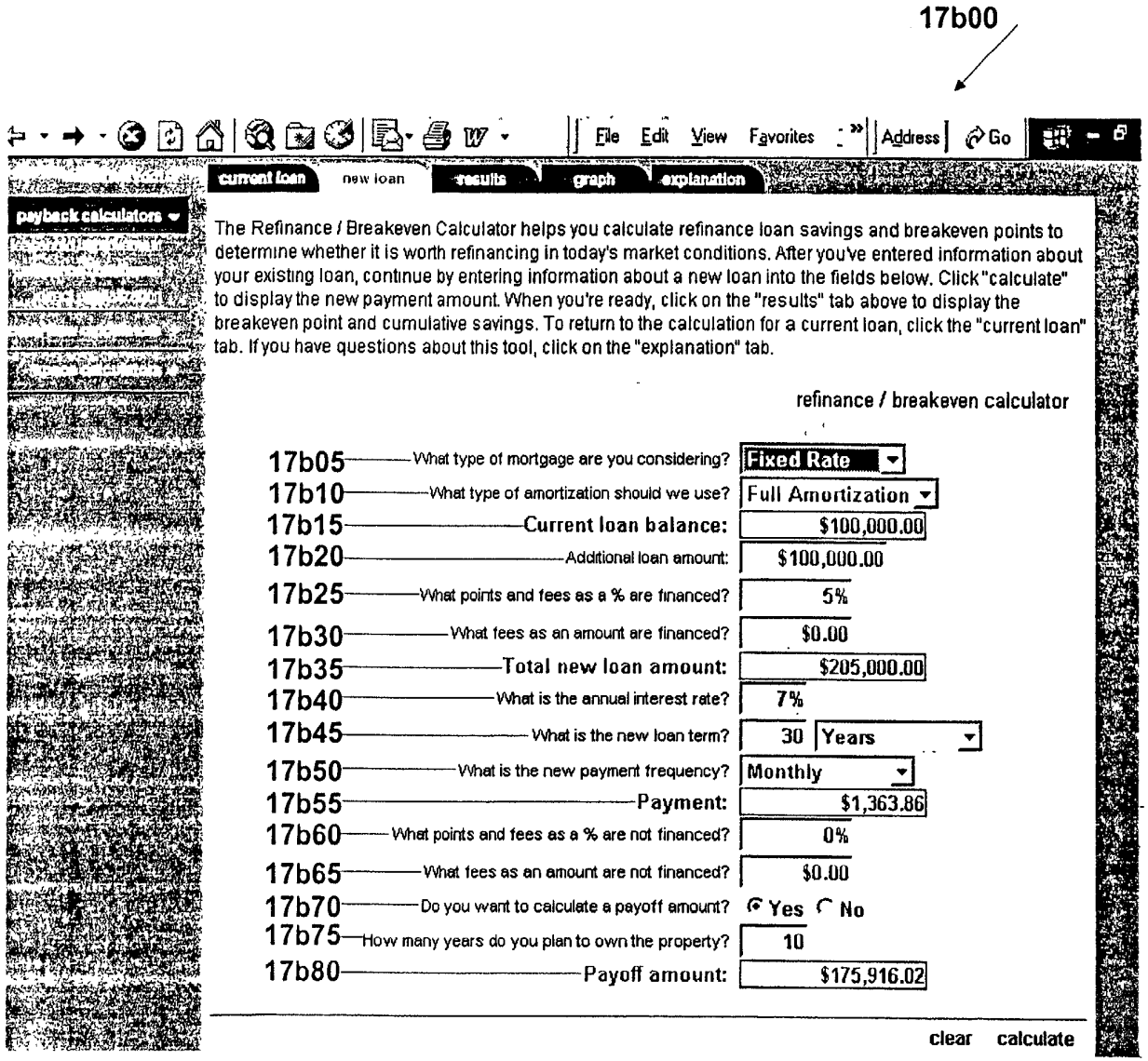
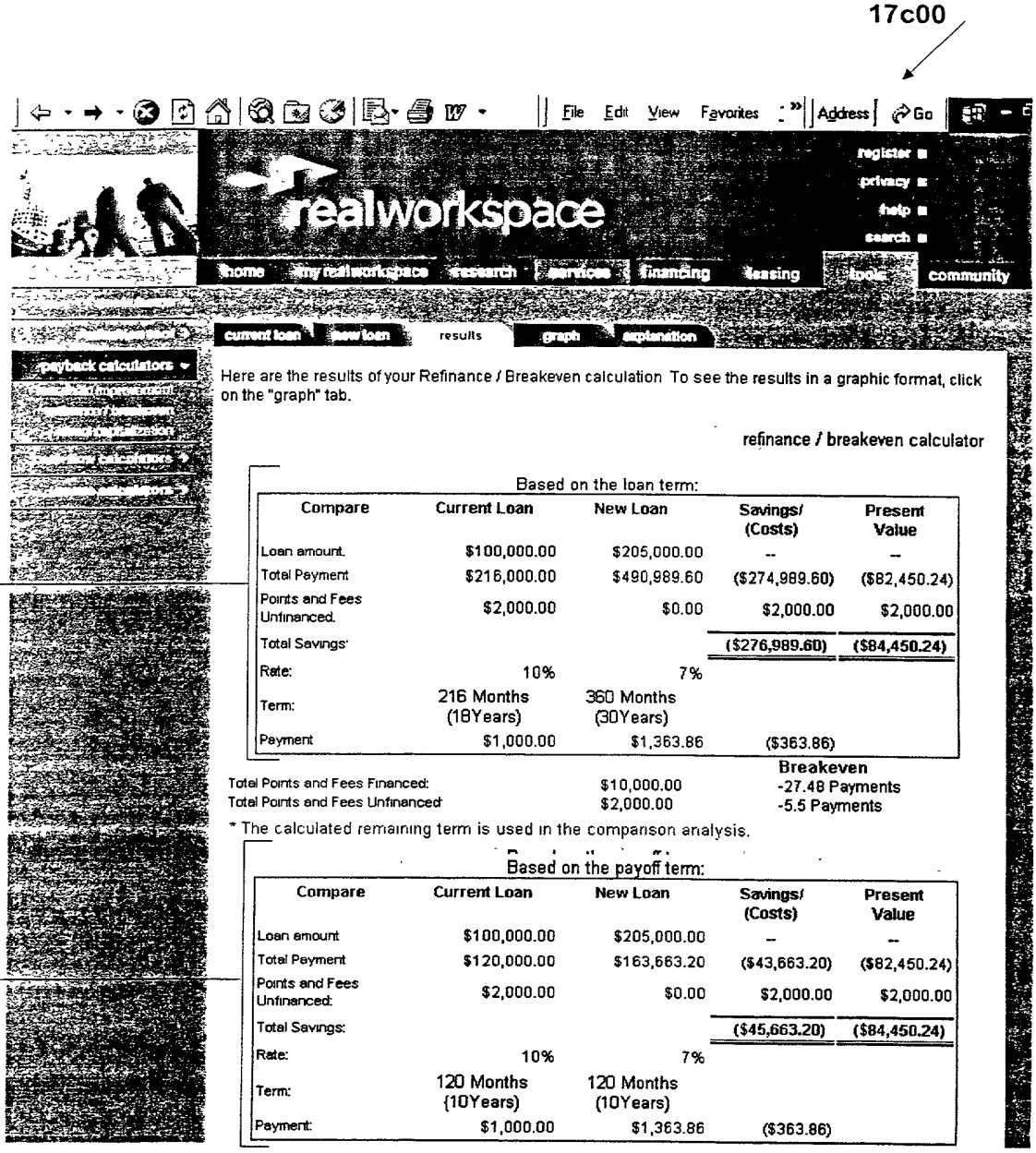

17b00
File Edit View Favorites Address Go
current loan
new loan
results
graph
explanation
payback calculators
The Refinance / Breakeven Calculator helps you calculate refinance loan savings and breakeven points to determine whether it is worth refinancing in today's market conditions. After you've entered information about your existing loan, continue by entering information about a new loan into the fields below. Click "calculate" to display the new payment amount. When you're ready, click on the "results" tab above to display the breakeven point and cumulative savings. To return to the calculation for a current loan, click the "current loan" tab. If you have questions about this tool, click on the "explanation" tab.
refinance / breakeven calculator
17b05 What type of mortgage are you considering? Fixed Rate
17b10 What type of amortization should we use? Full Amortization
17b15 Current loan balance: $100,000.00
17b20 Additional loan amount: $100,000.00
17b25 What points and fees as a % are financed? 5%
17b30 What fees as an amount are financed? $0.00
17b35 Total new loan amount: $205,000.00
17b40 What is the annual interest rate? 7%
17b45 What is the new loan term? 30 Years
17b50 What is the new payment frequency? Monthly
17b55 Payment: $1,363.86
17b60 What points and fees as a % are not financed? 0%
17b65 What fees as an amount are not financed? $0.00
17b70 Do you want to calculate a payoff amount? Yes No
17b75 How many years do you plan to own the property? 10
17b80 Payoff amount: $175,916.02
clear calculate

FIG. 17c



Based on the loan term:

Compare	Current Loan	New Loan	Savings/ (Costs)	Present Value
Loan amount	$100,000.00	$205,000.00	--	--
Total Payment	$216,000.00	$490,989.60	($274,989.60)	($82,450.24)
Points and Fees Unfinanced	$2,000.00	$0.00	$2,000.00	$2,000.00
Total Savings:			($276,989.60)	($84,450.24)
Rate:	10%	7%		
Term:	216 Months (18Years)	360 Months (30Years)		
Payment	$1,000.00	$1,363.86	($363.86)	

		Breakeven
Total Points and Fees Financed:	$10,000.00	-27.48 Payments
Total Points and Fees Unfinanced:	$2,000.00	-5.5 Payments

* The calculated remaining term is used in the comparison analysis.

Based on the payoff term:

Compare	Current Loan	New Loan	Savings/ (Costs)	Present Value
Loan amount	$100,000.00	$205,000.00	--	--
Total Payment	$120,000.00	$163,663.20	($43,663.20)	($82,450.24)
Points and Fees Unfinanced:	$2,000.00	$0.00	$2,000.00	$2,000.00
Total Savings:			($45,663.20)	($84,450.24)
Rate:	10%	7%		
Term:	120 Months (10Years)	120 Months (10Years)		
Payment:	$1,000.00	$1,363.86	($363.86)	

FIG. 17d

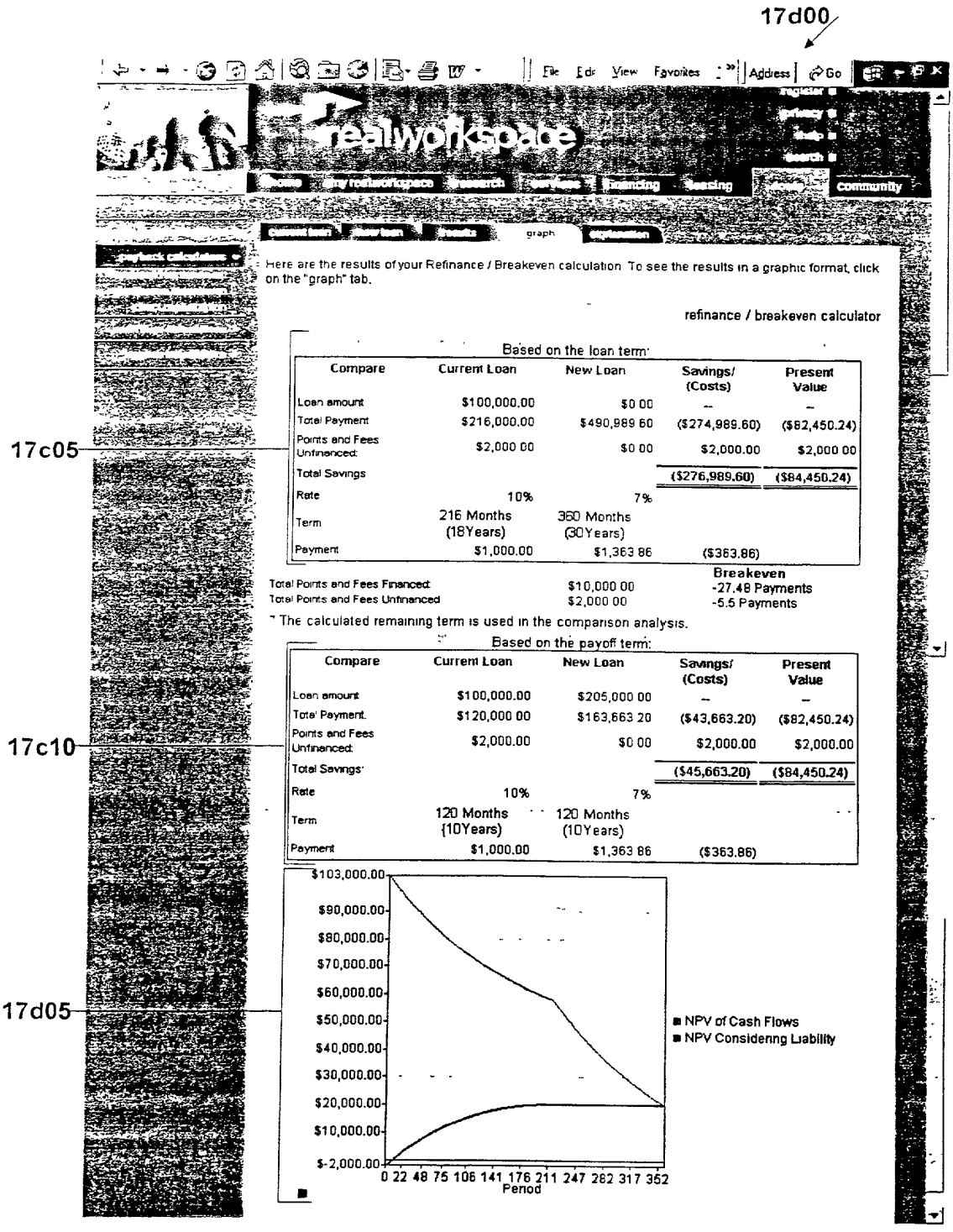

17d00
File Edit View Favorites Address Go
realworkspace
community
graph
Here are the results of your Refinance / Breakeven calculation. To see the results in a graphic format, click on the "graph" tab.
refinance / breakeven calculator
17c05
Based on the loan term:
Compare | Current Loan | New Loan | Savings/ (Costs) | Present Value
Loan amount | $100,000.00 | $0.00 | -- | --
Total Payment | $216,000.00 | $490,989.60 | ($274,989.60) | ($82,450.24)
Points and Fees Unfinanced: | $2,000.00 | $0.00 | $2,000.00 | $2,000.00
Total Savings | | | ($276,989.60) | ($84,450.24)
Rate | 10% | 7% | |
Term | 216 Months (18Years) | 360 Months (30Years) | |
Payment | $1,000.00 | $1,363.86 | ($363.86) |
Total Points and Fees Financed: $10,000.00
Total Points and Fees Unfinanced $2,000.00
Breakeven
-27.48 Payments
-5.5 Payments
* The calculated remaining term is used in the comparison analysis.
17c10
Based on the payoff term:
Compare | Current Loan | New Loan | Savings/ (Costs) | Present Value
Loan amount | $100,000.00 | $205,000.00 | -- | --
Total Payment | $120,000.00 | $163,663.20 | ($43,663.20) | ($82,450.24)
Points and Fees Unfinanced: | $2,000.00 | $0.00 | $2,000.00 | $2,000.00
Total Savings* | | | ($45,663.20) | ($84,450.24)
Rate | 10% | 7% | |
Term | 120 Months (10Years) | 120 Months (10Years) | |
Payment | $1,000.00 | $1,363.86 | ($363.86) |
17d05
$103,000.00
$90,000.00
$80,000.00
$70,000.00
$60,000.00
$50,000.00
$40,000.00
$30,000.00
$20,000.00
$10,000.00
$-2,000.00
0 22 48 75 106 141 176 211 247 282 317 352
Period
NPV of Cash Flows
NPV Considering Liability

FIG. 17e

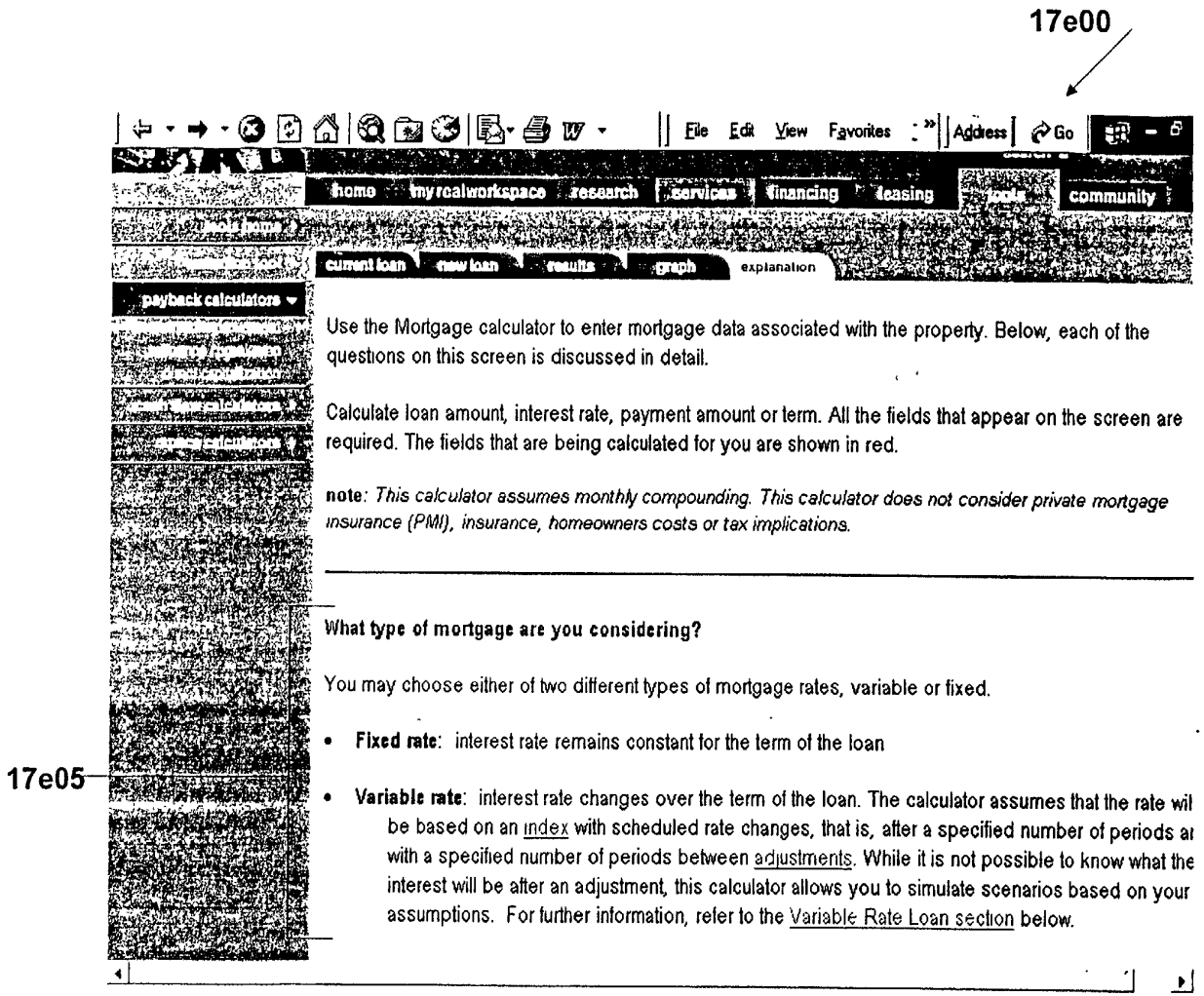

17e00
17e05
File Edit View Favorites Address Go
home
my realworkspace
research
services
financing
leasing
community
current loan
new loan
results
graph
explanation
payback calculators
Use the Mortgage calculator to enter mortgage data associated with the property. Below, each of the questions on this screen is discussed in detail.
Calculate loan amount, interest rate, payment amount or term. All the fields that appear on the screen are required. The fields that are being calculated for you are shown in red.
note: This calculator assumes monthly compounding. This calculator does not consider private mortgage insurance (PMI), insurance, homeowners costs or tax implications.
What type of mortgage are you considering?
You may choose either of two different types of mortgage rates, variable or fixed.
Fixed rate: interest rate remains constant for the term of the loan
Variable rate: interest rate changes over the term of the loan. The calculator assumes that the rate wil be based on an index with scheduled rate changes, that is, after a specified number of periods ar with a specified number of periods between adjustments. While it is not possible to know what the interest will be after an adjustment, this calculator allows you to simulate scenarios based on your assumptions. For further information, refer to the Variable Rate Loan section below.

FIG. 17e (cont.)

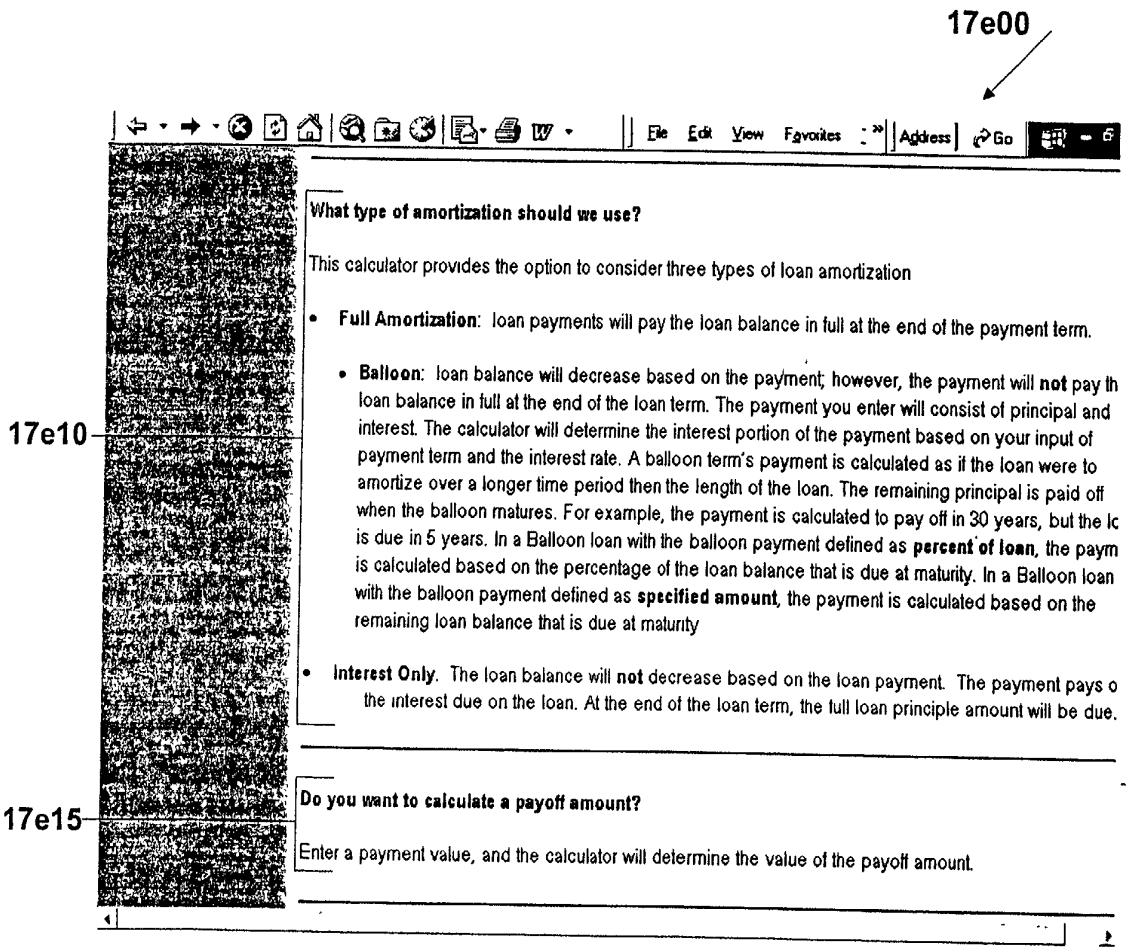

17e00
17e10
17e15
File Edit View Favorites Address Go
What type of amortization should we use?
This calculator provides the option to consider three types of loan amortization
• Full Amortization: loan payments will pay the loan balance in full at the end of the payment term.
• Balloon: loan balance will decrease based on the payment; however, the payment will not pay th loan balance in full at the end of the loan term. The payment you enter will consist of principal and interest. The calculator will determine the interest portion of the payment based on your input of payment term and the interest rate. A balloon term's payment is calculated as if the loan were to amortize over a longer time period then the length of the loan. The remaining principal is paid off when the balloon matures. For example, the payment is calculated to pay off in 30 years, but the lc is due in 5 years. In a Balloon loan with the balloon payment defined as percent of loan, the paym is calculated based on the percentage of the loan balance that is due at maturity. In a Balloon loan with the balloon payment defined as specified amount, the payment is calculated based on the remaining loan balance that is due at maturity
• Interest Only. The loan balance will not decrease based on the loan payment. The payment pays o the interest due on the loan. At the end of the loan term, the full loan principle amount will be due.
Do you want to calculate a payoff amount?
Enter a payment value, and the calculator will determine the value of the payoff amount.

FIG. 17e (cont.)

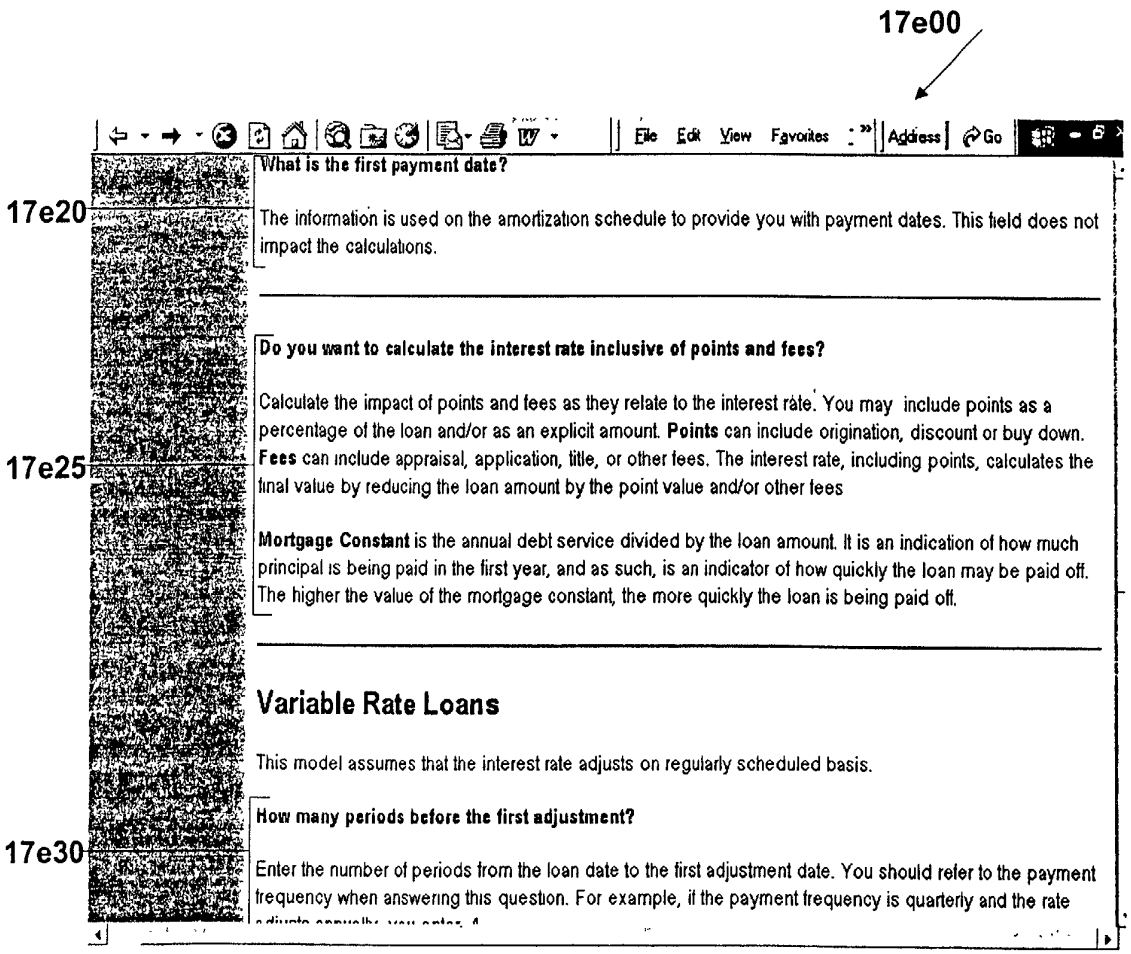

17e00
File Edit View Favorites Address Go
17e20
What is the first payment date?
The information is used on the amortization schedule to provide you with payment dates. This field does not impact the calculations.
17e25
Do you want to calculate the interest rate inclusive of points and fees?
Calculate the impact of points and fees as they relate to the interest rate. You may include points as a percentage of the loan and/or as an explicit amount. Points can include origination, discount or buy down. Fees can include appraisal, application, title, or other fees. The interest rate, including points, calculates the final value by reducing the loan amount by the point value and/or other fees
Mortgage Constant is the annual debt service divided by the loan amount. It is an indication of how much principal is being paid in the first year, and as such, is an indicator of how quickly the loan may be paid off. The higher the value of the mortgage constant, the more quickly the loan is being paid off.
Variable Rate Loans
This model assumes that the interest rate adjusts on regularly scheduled basis.
17e30
How many periods before the first adjustment?
Enter the number of periods from the loan date to the first adjustment date. You should refer to the payment frequency when answering this question. For example, if the payment frequency is quarterly and the rate

FIG. 17e (cont.)

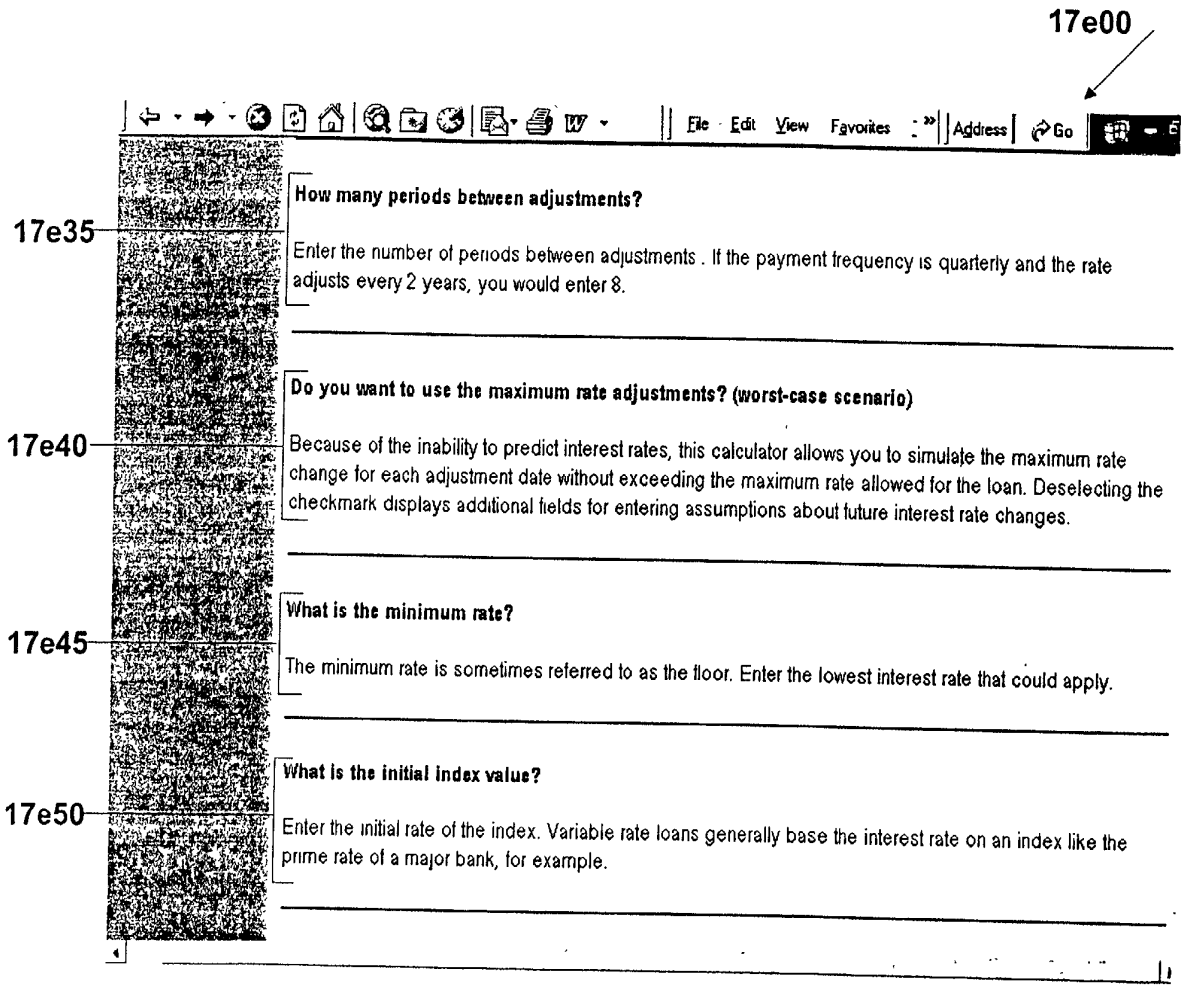

17e00
File Edit View Favorites Address Go
17e35
How many periods between adjustments?
Enter the number of periods between adjustments . If the payment frequency is quarterly and the rate adjusts every 2 years, you would enter 8.
17e40
Do you want to use the maximum rate adjustments? (worst-case scenario)
Because of the inability to predict interest rates, this calculator allows you to simulate the maximum rate change for each adjustment date without exceeding the maximum rate allowed for the loan. Deselecting the checkmark displays additional fields for entering assumptions about future interest rate changes.
17e45
What is the minimum rate?
The minimum rate is sometimes referred to as the floor. Enter the lowest interest rate that could apply.
17e50
What is the initial index value?
Enter the initial rate of the index. Variable rate loans generally base the interest rate on an index like the prime rate of a major bank, for example.

FIG. 17e (cont.)

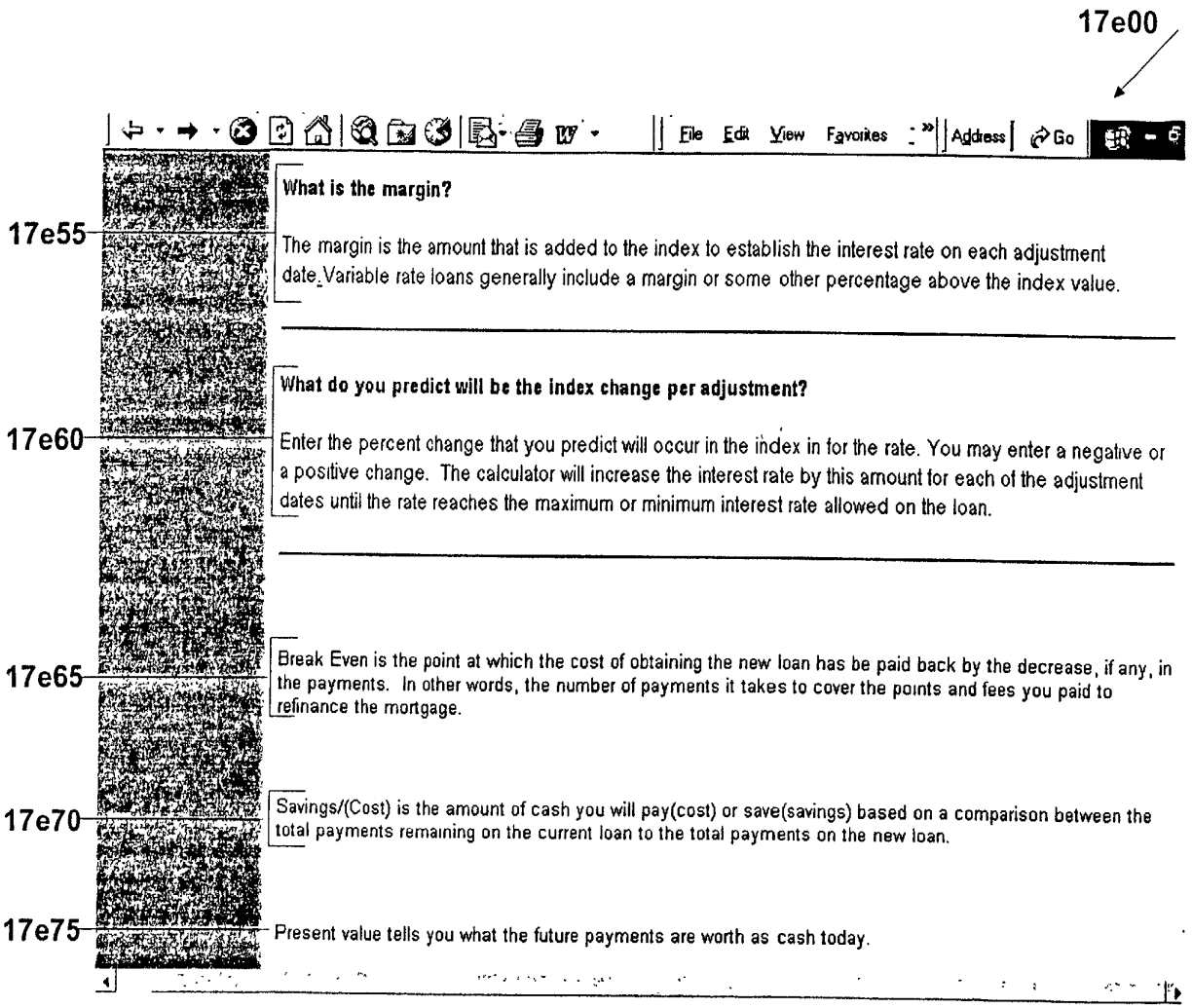
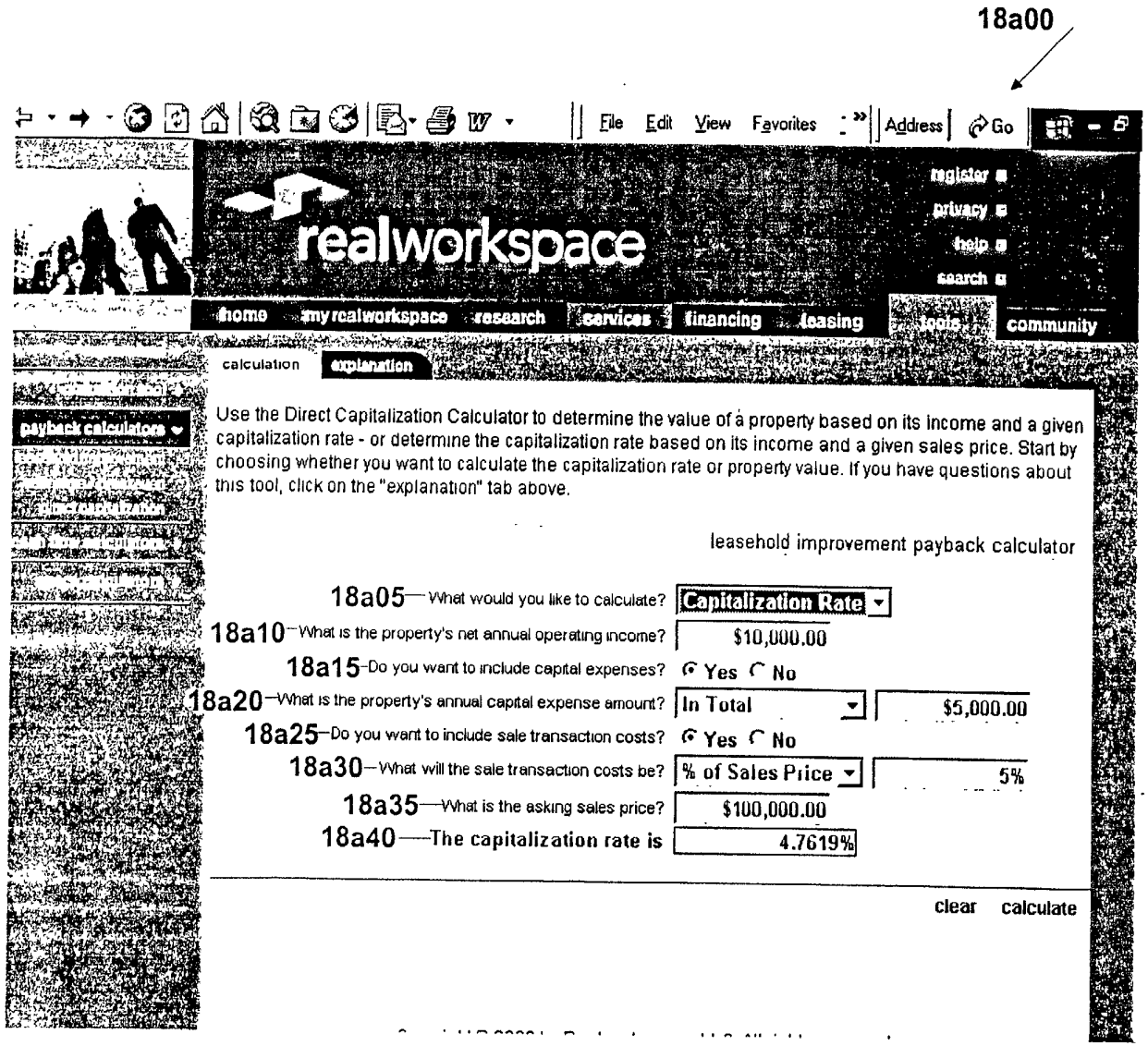

17e00
File Edit View Favorites
Address
Go
17e55
What is the margin?
The margin is the amount that is added to the index to establish the interest rate on each adjustment date. Variable rate loans generally include a margin or some other percentage above the index value.
17e60
What do you predict will be the index change per adjustment?
Enter the percent change that you predict will occur in the index in for the rate. You may enter a negative or a positive change. The calculator will increase the interest rate by this amount for each of the adjustment dates until the rate reaches the maximum or minimum interest rate allowed on the loan.
17e65
Break Even is the point at which the cost of obtaining the new loan has be paid back by the decrease, if any, in the payments. In other words, the number of payments it takes to cover the points and fees you paid to refinance the mortgage.
17e70
Savings/(Cost) is the amount of cash you will pay(cost) or save(savings) based on a comparison between the total payments remaining on the current loan to the total payments on the new loan.
17e75
Present value tells you what the future payments are worth as cash today.

FIG. 18a


18a00
File Edit View Favorites Address Go
realworkspace
register
privacy
help
search
home
my realworkspace
research
services
financing
leasing
tools
community
calculation
explanation
payback calculators
Use the Direct Capitalization Calculator to determine the value of a property based on its income and a given capitalization rate - or determine the capitalization rate based on its income and a given sales price. Start by choosing whether you want to calculate the capitalization rate or property value. If you have questions about this tool, click on the "explanation" tab above.
leasehold improvement payback calculator
18a05 What would you like to calculate? Capitalization Rate
18a10 What is the property's net annual operating income? $10,000.00
18a15 Do you want to include capital expenses? Yes No
18a20 What is the property's annual capital expense amount? In Total $5,000.00
18a25 Do you want to include sale transaction costs? Yes No
18a30 What will the sale transaction costs be? % of Sales Price 5%
18a35 What is the asking sales price? $100,000.00
18a40 The capitalization rate is 4.7619%
clear
calculate

18b00

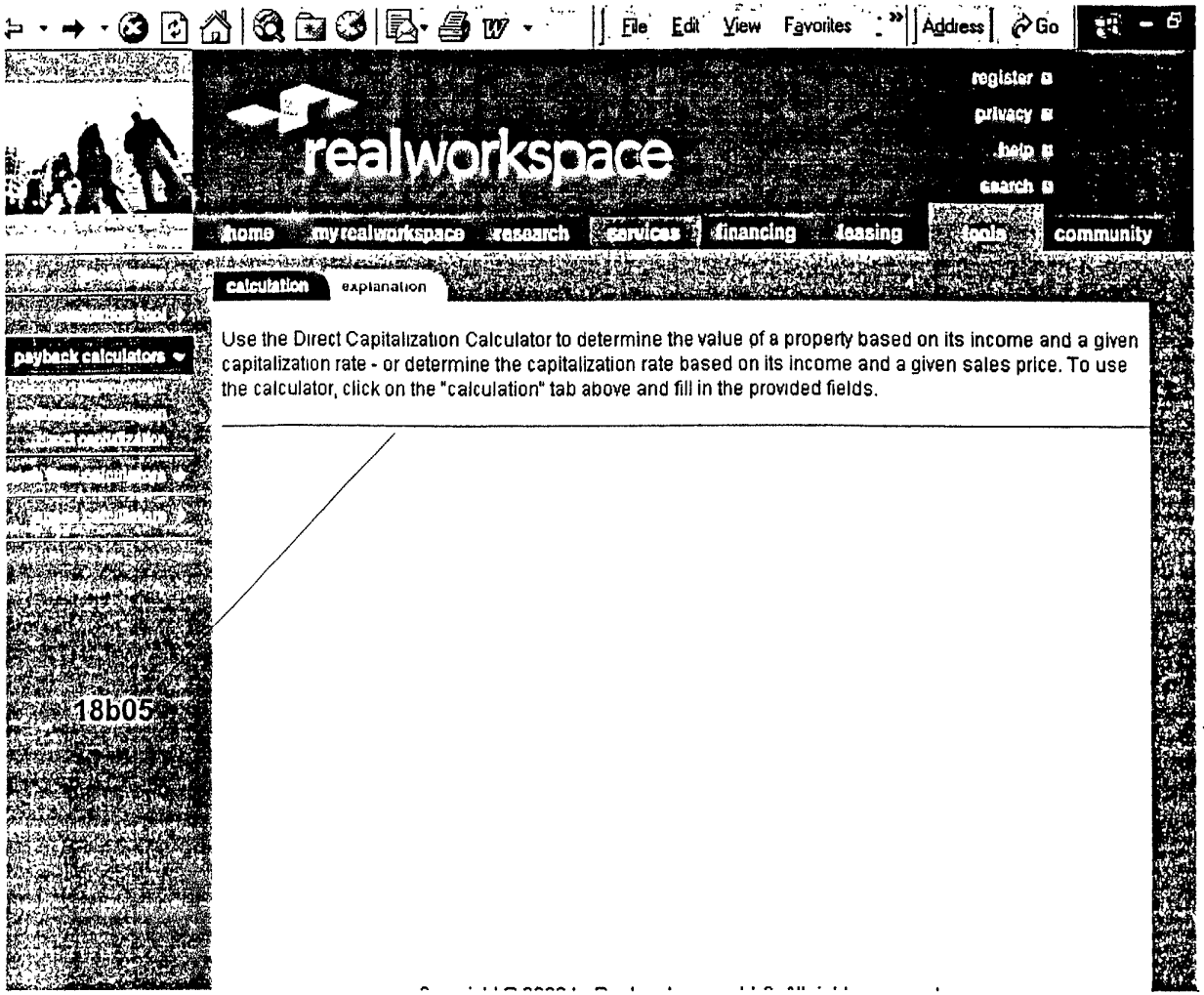


FIG. 18b

FIG. 19a

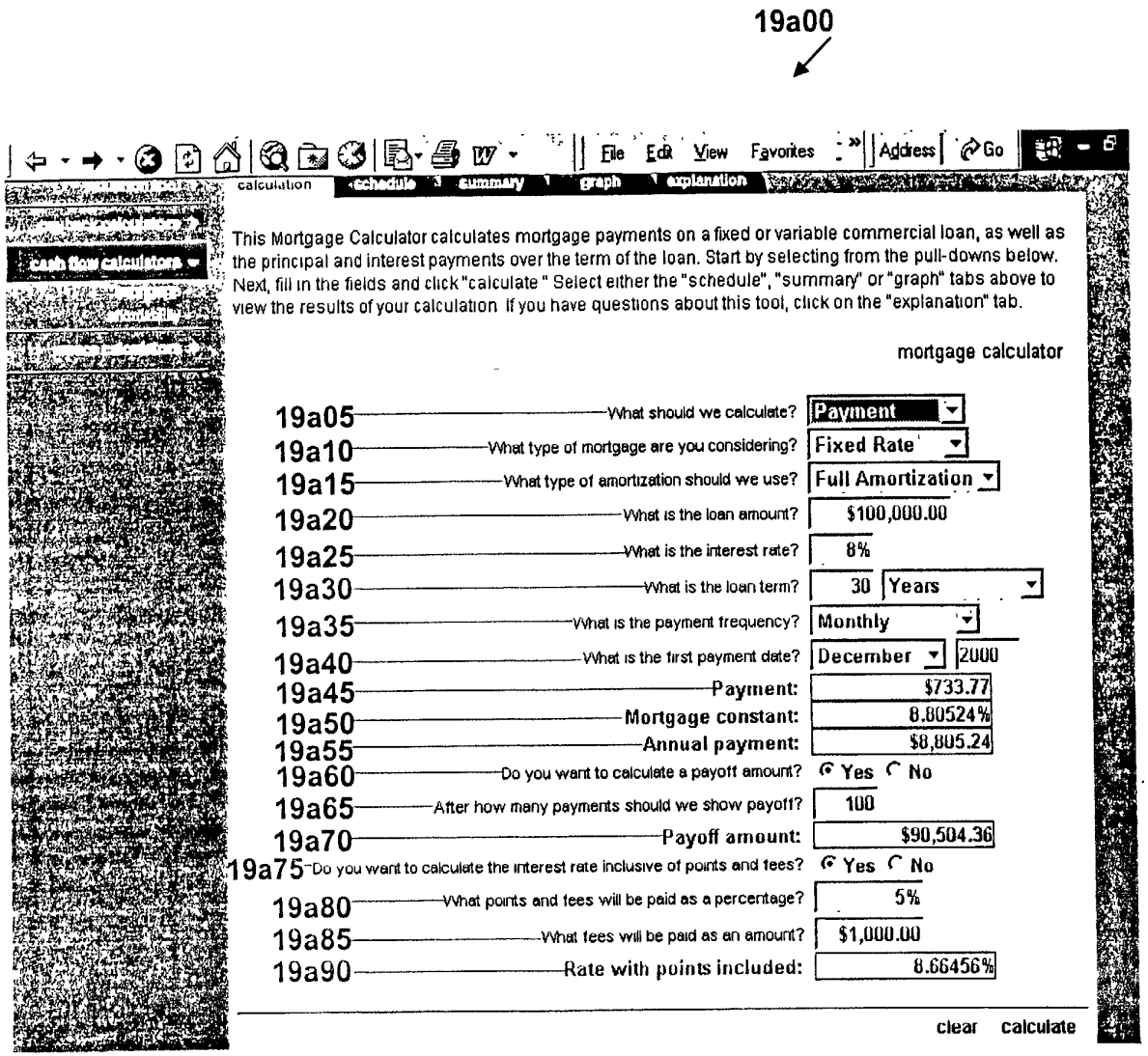

19a00
File Edit View Favorites Address Go
calculation schedule summary graph explanation
cash flow calculators
This Mortgage Calculator calculates mortgage payments on a fixed or variable commercial loan, as well as the principal and interest payments over the term of the loan. Start by selecting from the pull-downs below. Next, fill in the fields and click "calculate" Select either the "schedule", "summary" or "graph" tabs above to view the results of your calculation If you have questions about this tool, click on the "explanation" tab.
mortgage calculator
19a05 What should we calculate? Payment
19a10 What type of mortgage are you considering? Fixed Rate
19a15 What type of amortization should we use? Full Amortization
19a20 What is the loan amount? $100,000.00
19a25 What is the interest rate? 8%
19a30 What is the loan term? 30 Years
19a35 What is the payment frequency? Monthly
19a40 What is the first payment date? December 2000
19a45 Payment: $733.77
19a50 Mortgage constant: 8.80524%
19a55 Annual payment: $8,805.24
19a60 Do you want to calculate a payoff amount? Yes No
19a65 After how many payments should we show payoff? 100
19a70 Payoff amount: $90,504.36
19a75 Do you want to calculate the interest rate inclusive of points and fees? Yes No
19a80 What points and fees will be paid as a percentage? 5%
19a85 What fees will be paid as an amount? $1,000.00
19a90 Rate with points included: 8.66456%
clear calculate

FIG. 19b

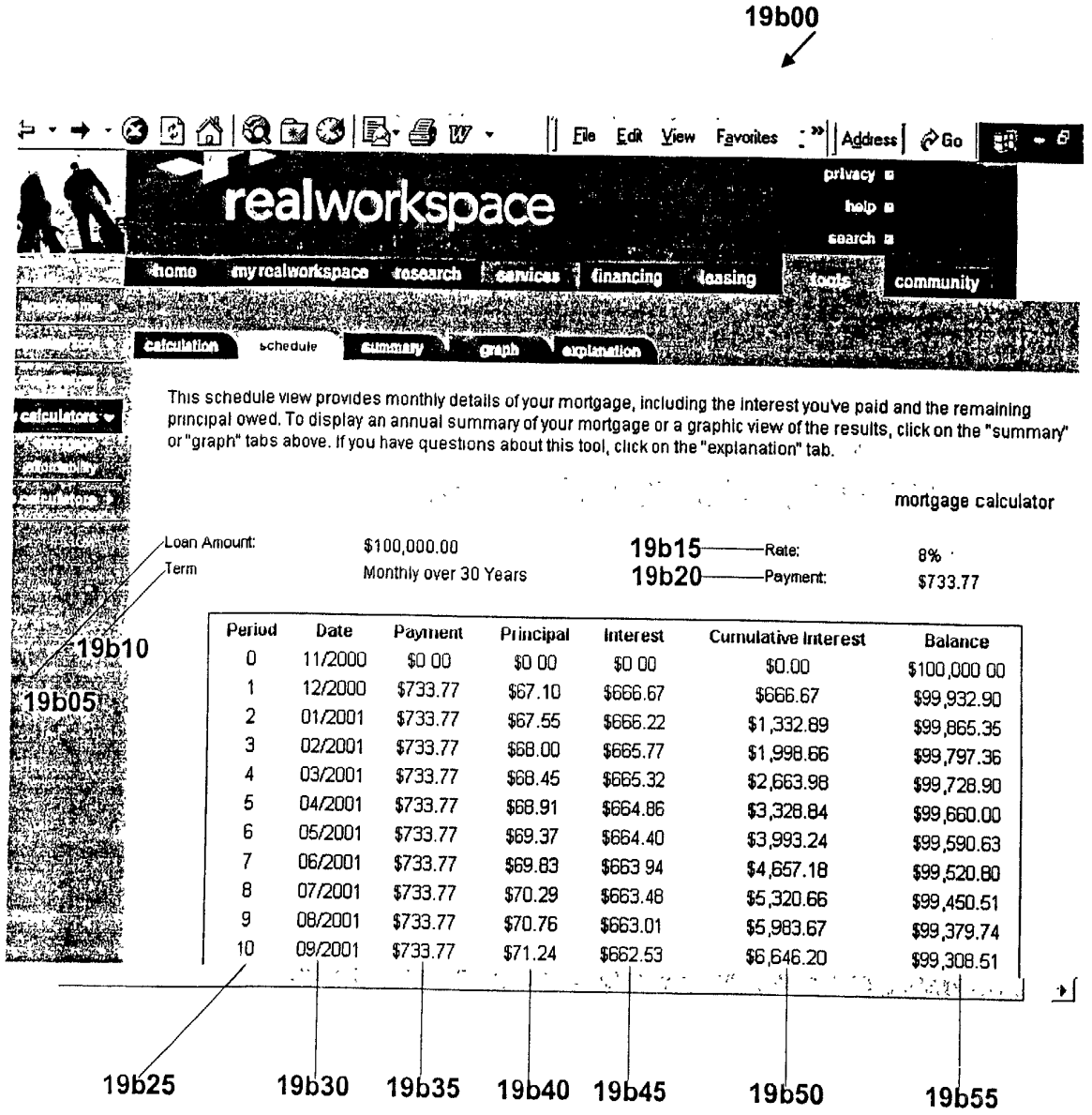
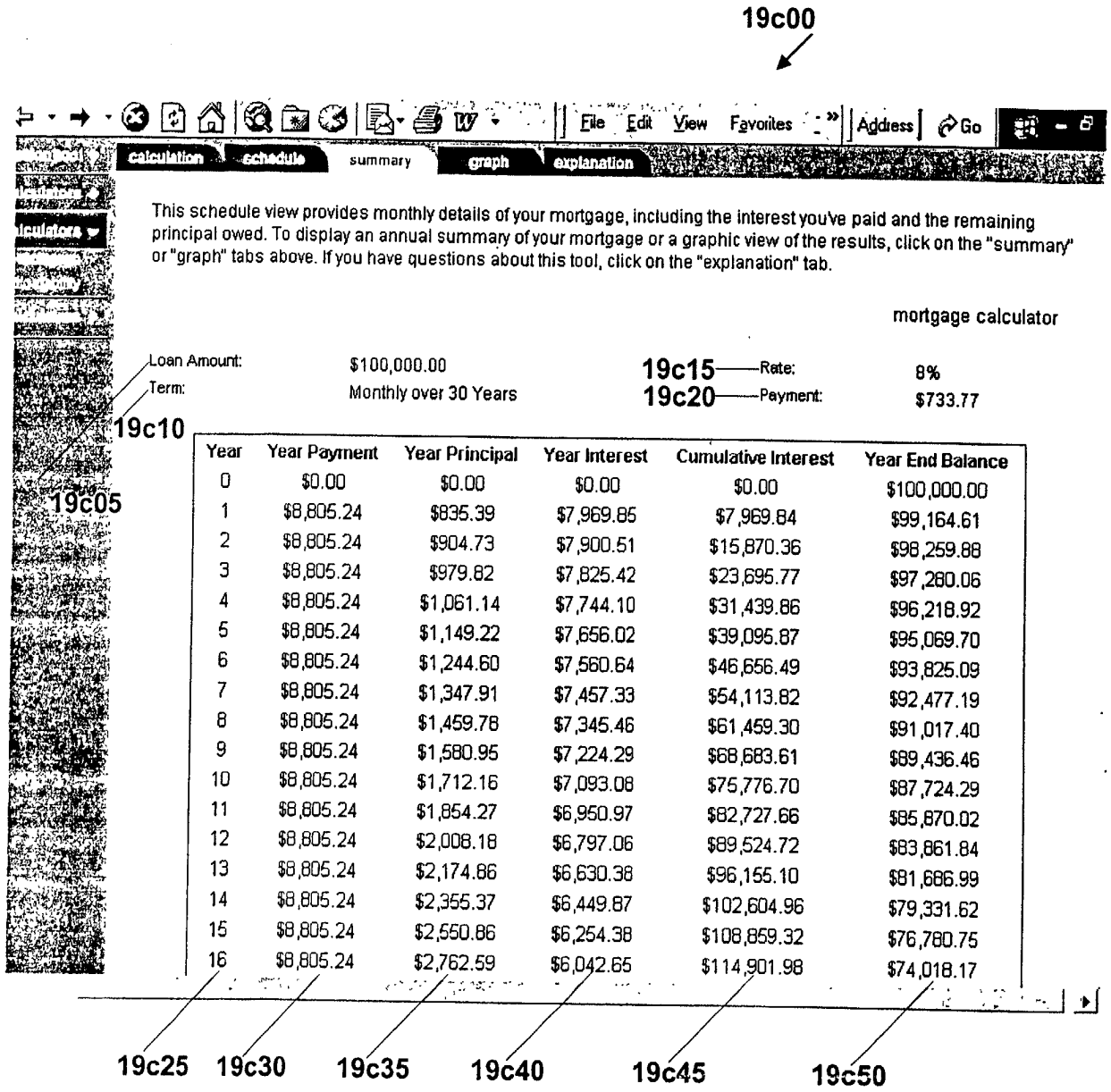
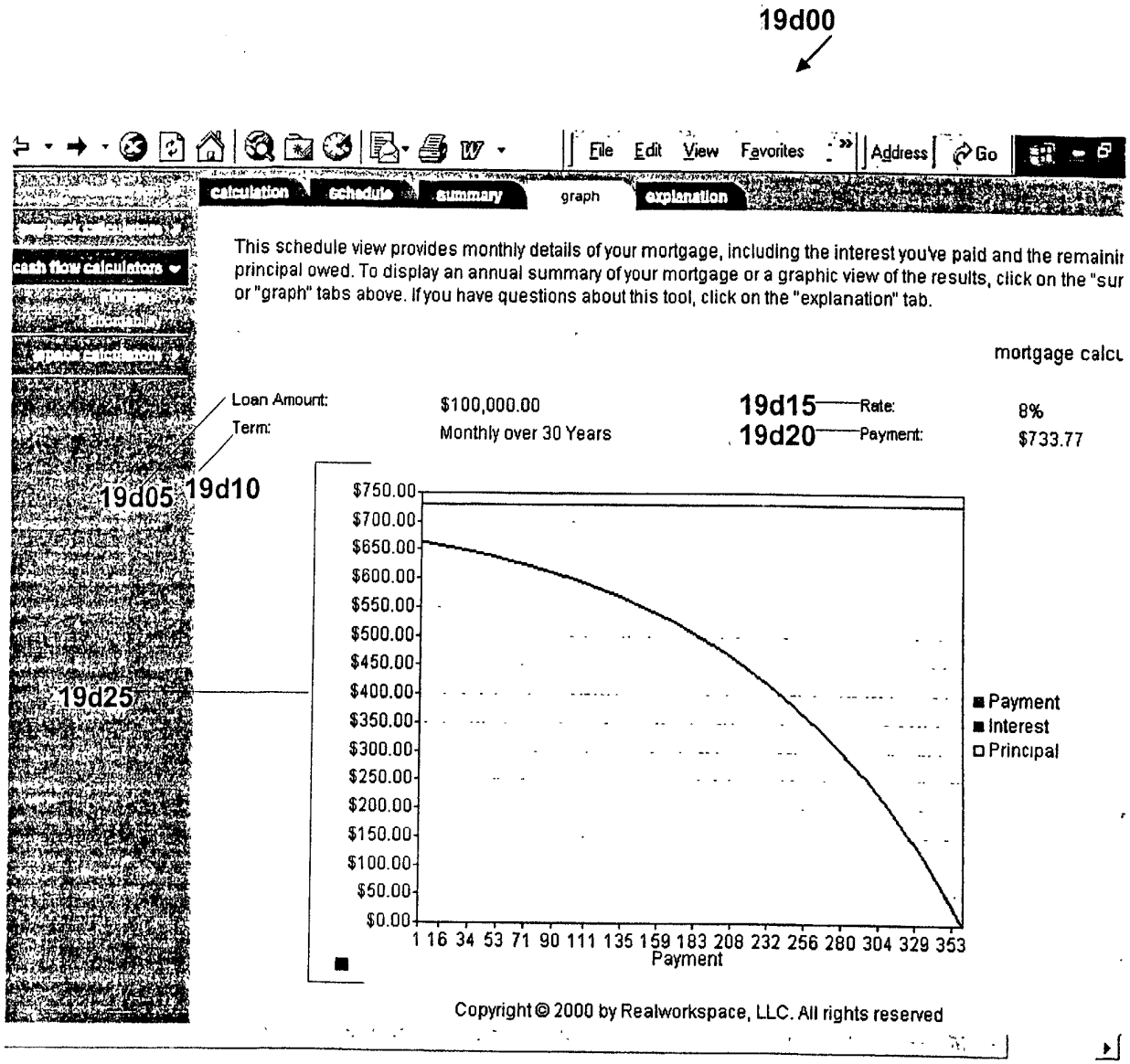

19b00
File Edit View Favorites Address Go
realworkspace
privacy
help
search
home
my realworkspace
research
services
financing
leasing
tools
community
calculation
schedule
summary
graph
explanation
calculators
This schedule view provides monthly details of your mortgage, including the interest you've paid and the remaining principal owed. To display an annual summary of your mortgage or a graphic view of the results, click on the "summary" or "graph" tabs above. If you have questions about this tool, click on the "explanation" tab.
mortgage calculator
Loan Amount:
$100,000.00
19b15
Rate:
8%
Term
Monthly over 30 Years
19b20
Payment:
$733.77
19b10
19b05
Period | Date | Payment | Principal | Interest | Cumulative Interest | Balance
0 | 11/2000 | $0.00 | $0.00 | $0.00 | $0.00 | $100,000.00
1 | 12/2000 | $733.77 | $67.10 | $666.67 | $666.67 | $99,932.90
2 | 01/2001 | $733.77 | $67.55 | $666.22 | $1,332.89 | $99,865.35
3 | 02/2001 | $733.77 | $68.00 | $665.77 | $1,998.66 | $99,797.36
4 | 03/2001 | $733.77 | $68.45 | $665.32 | $2,663.98 | $99,728.90
5 | 04/2001 | $733.77 | $68.91 | $664.86 | $3,328.84 | $99,660.00
6 | 05/2001 | $733.77 | $69.37 | $664.40 | $3,993.24 | $99,590.63
7 | 06/2001 | $733.77 | $69.83 | $663.94 | $4,657.18 | $99,520.80
8 | 07/2001 | $733.77 | $70.29 | $663.48 | $5,320.66 | $99,450.51
9 | 08/2001 | $733.77 | $70.76 | $663.01 | $5,983.67 | $99,379.74
10 | 09/2001 | $733.77 | $71.24 | $662.53 | $6,646.20 | $99,308.51
19b25
19b30
19b35
19b40
19b45
19b50
19b55

FIG. 19c



Year	Year Payment	Year Principal	Year Interest	Cumulative Interest	Year End Balance
0	$0.00	$0.00	$0.00	$0.00	$100,000.00
1	$8,805.24	$835.39	$7,969.85	$7,969.84	$99,164.61
2	$8,805.24	$904.73	$7,900.51	$15,870.36	$98,259.88
3	$8,805.24	$979.82	$7,825.42	$23,695.77	$97,280.06
4	$8,805.24	$1,061.14	$7,744.10	$31,439.86	$96,218.92
5	$8,805.24	$1,149.22	$7,656.02	$39,095.87	$95,069.70
6	$8,805.24	$1,244.60	$7,560.64	$46,656.49	$93,825.09
7	$8,805.24	$1,347.91	$7,457.33	$54,113.82	$92,477.19
8	$8,805.24	$1,459.78	$7,345.46	$61,459.30	$91,017.40
9	$8,805.24	$1,580.95	$7,224.29	$68,683.61	$89,436.46
10	$8,805.24	$1,712.16	$7,093.08	$75,776.70	$87,724.29
11	$8,805.24	$1,854.27	$6,950.97	$82,727.66	$85,870.02
12	$8,805.24	$2,008.18	$6,797.06	$89,524.72	$83,861.84
13	$8,805.24	$2,174.86	$6,630.38	$96,155.10	$81,686.99
14	$8,805.24	$2,355.37	$6,449.87	$102,604.96	$79,331.62
15	$8,805.24	$2,550.86	$6,254.38	$108,859.32	$76,780.75
16	$8,805.24	$2,762.59	$6,042.65	$114,901.98	$74,018.17

FIG. 19d


19d00
File Edit View Favorites Address Go
calculation
schedule
summary
graph
explanation
This schedule view provides monthly details of your mortgage, including the interest you've paid and the remainir
principal owed. To display an annual summary of your mortgage or a graphic view of the results, click on the "sur
or "graph" tabs above. If you have questions about this tool, click on the "explanation" tab.
mortgage calcu
cash flow calculators
Loan Amount:
$100,000.00
19d15
Rate:
8%
Term:
Monthly over 30 Years
19d20
Payment:
$733.77
19d05
19d10
19d25
$750.00
$700.00
$650.00
$600.00
$550.00
$500.00
$450.00
$400.00
$350.00
$300.00
$250.00
$200.00
$150.00
$100.00
$50.00
$0.00
1 16 34 53 71 90 111 135 159 183 208 232 256 280 304 329 353
Payment
Payment
Interest
Principal
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19e00

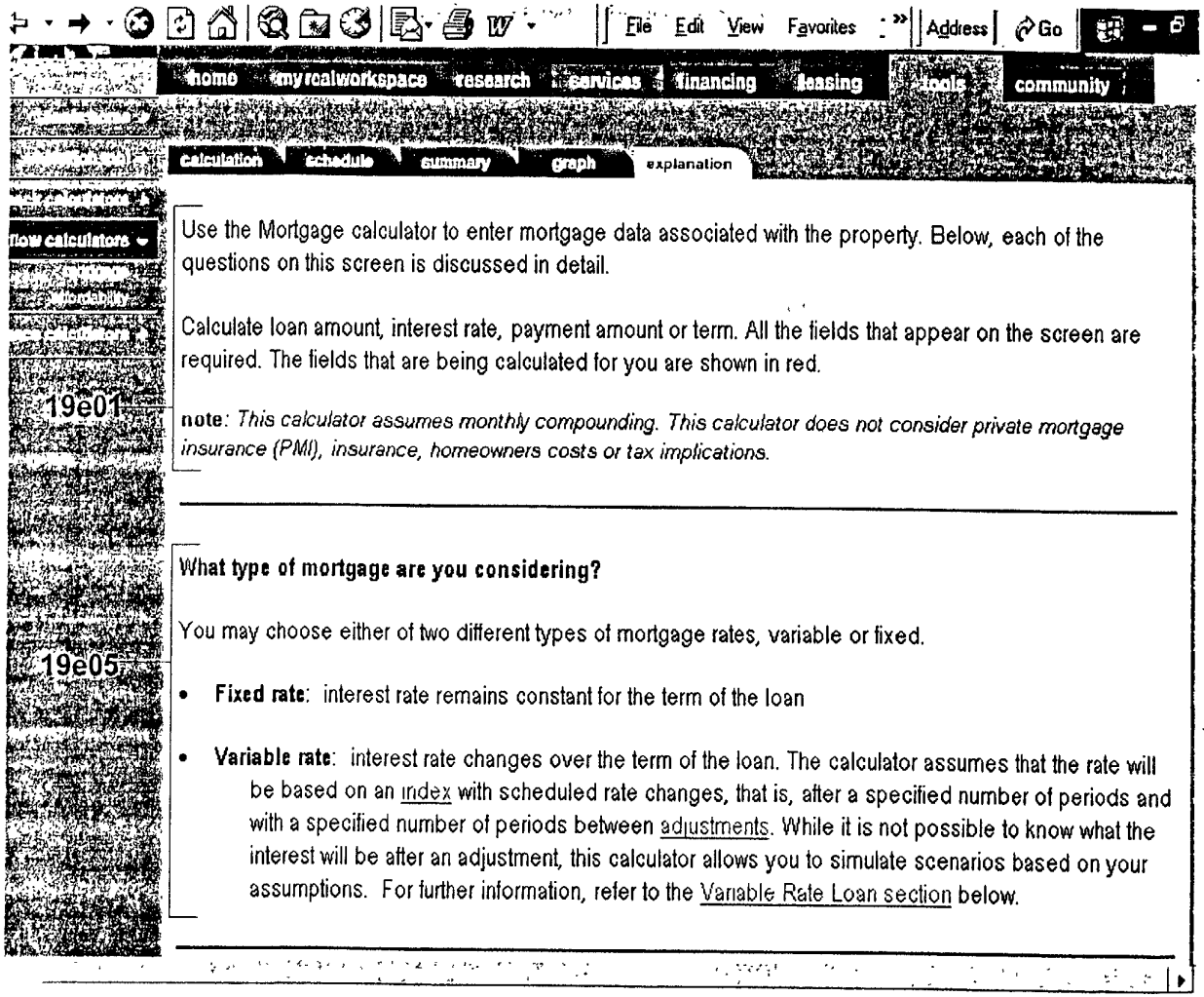
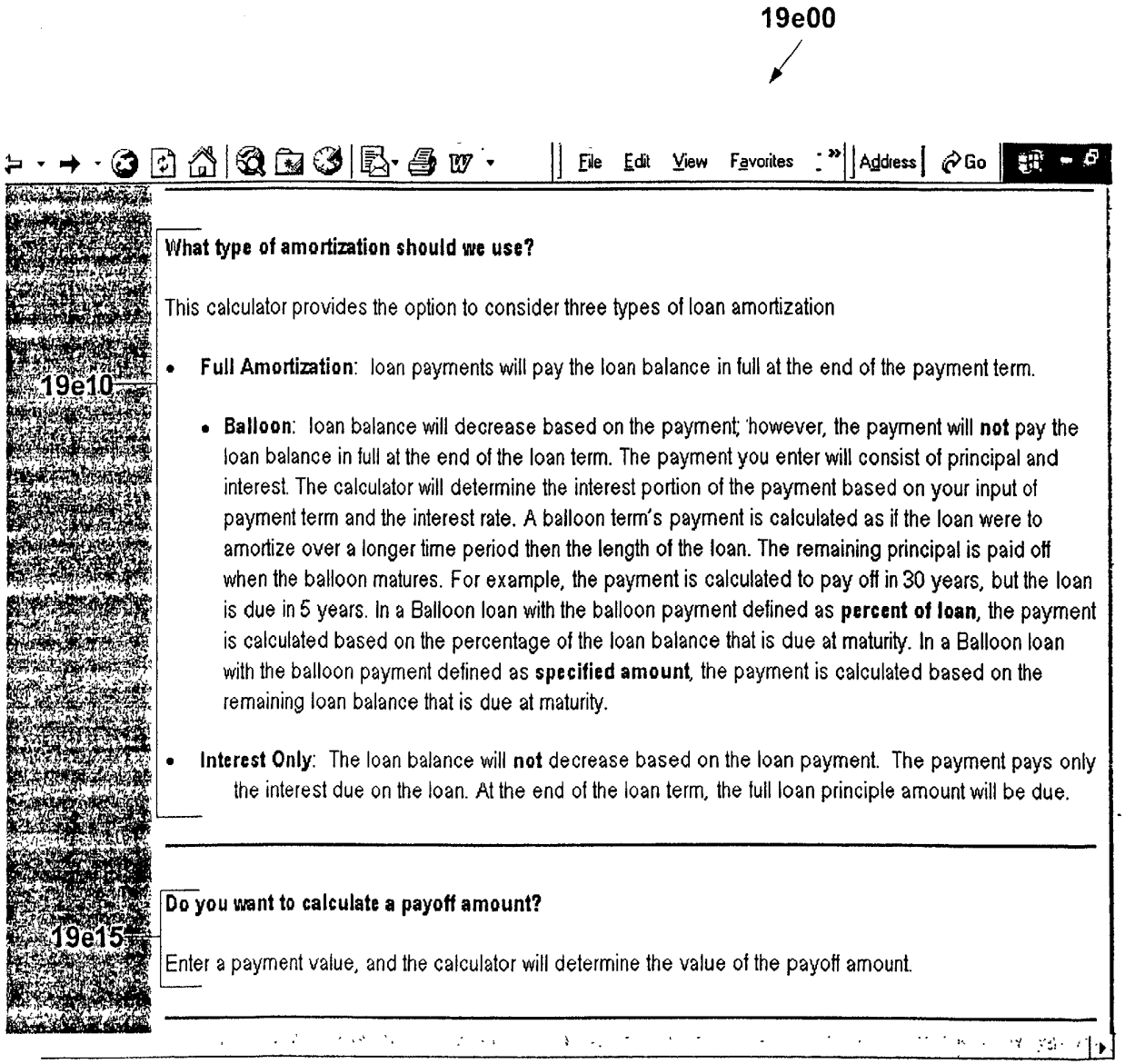


FIG. 19e

FIG. 19e (cont.)


19e00
File Edit View Favorites
Address
Go
19e10
What type of amortization should we use?
This calculator provides the option to consider three types of loan amortization
Full Amortization: loan payments will pay the loan balance in full at the end of the payment term.
Balloon: loan balance will decrease based on the payment; however, the payment will not pay the loan balance in full at the end of the loan term. The payment you enter will consist of principal and interest. The calculator will determine the interest portion of the payment based on your input of payment term and the interest rate. A balloon term's payment is calculated as if the loan were to amortize over a longer time period then the length of the loan. The remaining principal is paid off when the balloon matures. For example, the payment is calculated to pay off in 30 years, but the loan is due in 5 years. In a Balloon loan with the balloon payment defined as percent of loan, the payment is calculated based on the percentage of the loan balance that is due at maturity. In a Balloon loan with the balloon payment defined as specified amount, the payment is calculated based on the remaining loan balance that is due at maturity.
Interest Only: The loan balance will not decrease based on the loan payment. The payment pays only the interest due on the loan. At the end of the loan term, the full loan principle amount will be due.
19e15
Do you want to calculate a payoff amount?
Enter a payment value, and the calculator will determine the value of the payoff amount.

19e00

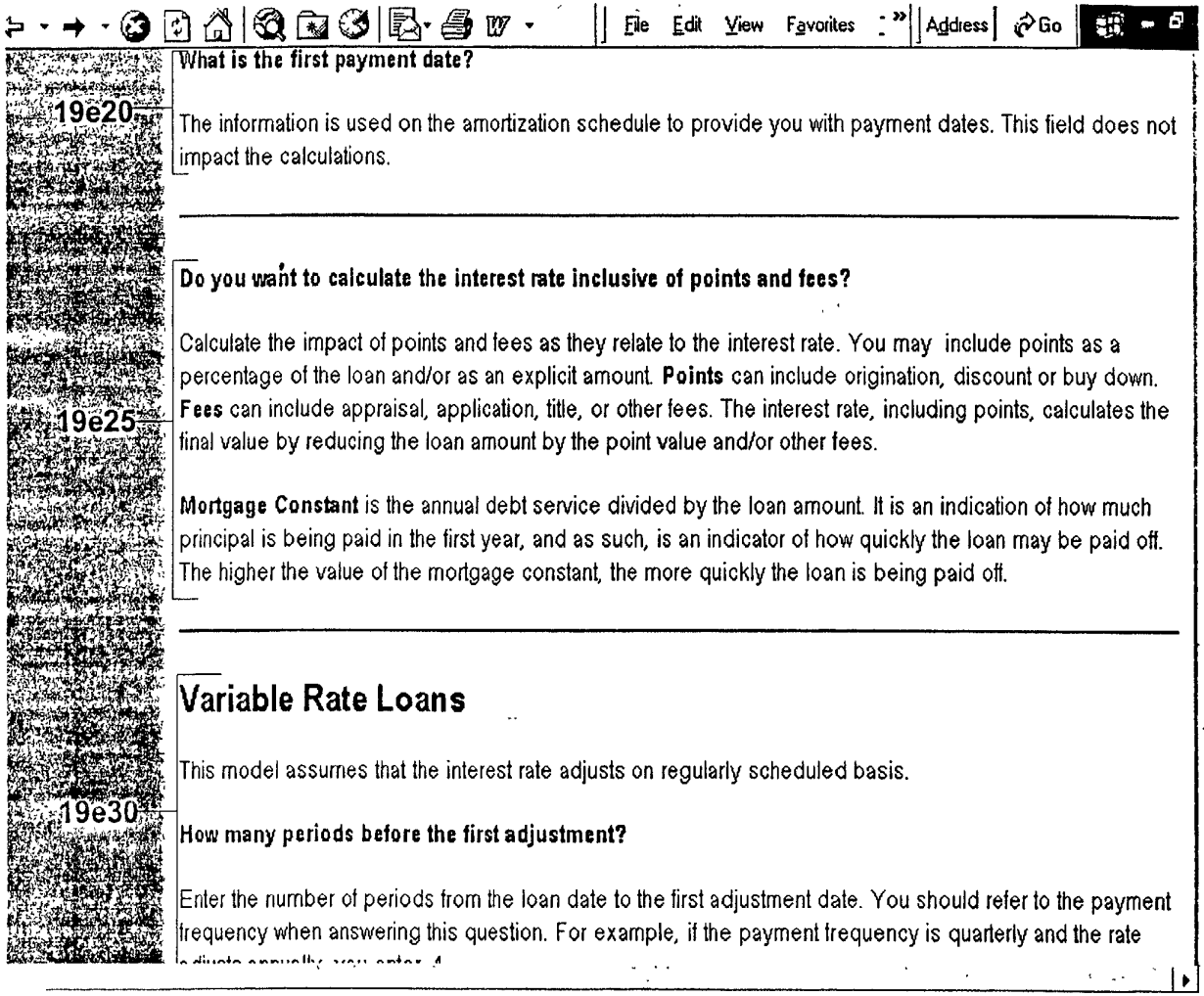


FIG. 19e (cont.)

FIG. 19e (cont.)

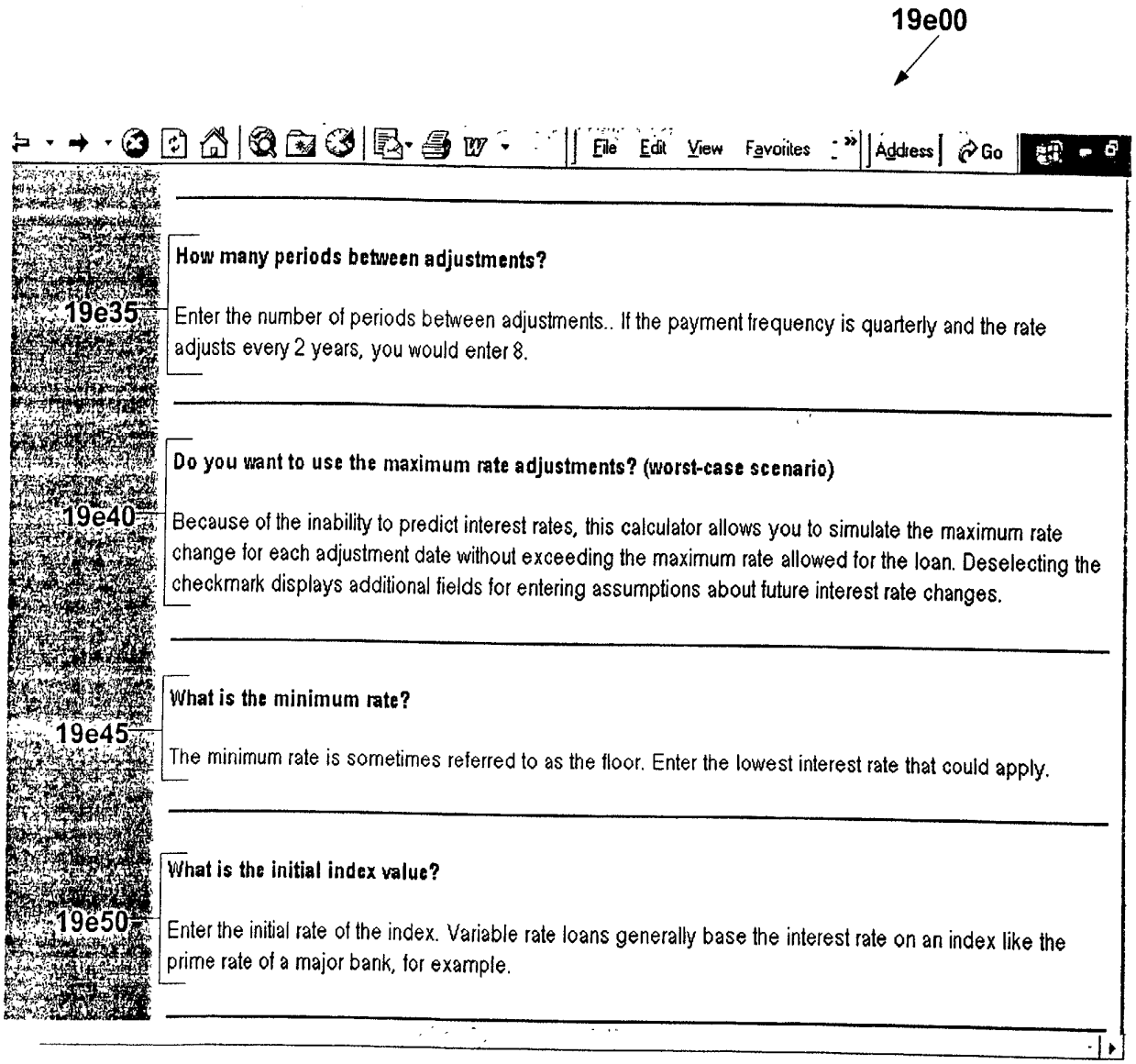

19e00
File Edit View Favorites Address Go
How many periods between adjustments?
19e35
Enter the number of periods between adjustments.. If the payment frequency is quarterly and the rate adjusts every 2 years, you would enter 8.
Do you want to use the maximum rate adjustments? (worst-case scenario)
19e40
Because of the inability to predict interest rates, this calculator allows you to simulate the maximum rate change for each adjustment date without exceeding the maximum rate allowed for the loan. Deselecting the checkmark displays additional fields for entering assumptions about future interest rate changes.
What is the minimum rate?
19e45
The minimum rate is sometimes referred to as the floor. Enter the lowest interest rate that could apply.
What is the initial index value?
19e50
Enter the initial rate of the index. Variable rate loans generally base the interest rate on an index like the prime rate of a major bank, for example.

FIG. 19e (cont.)

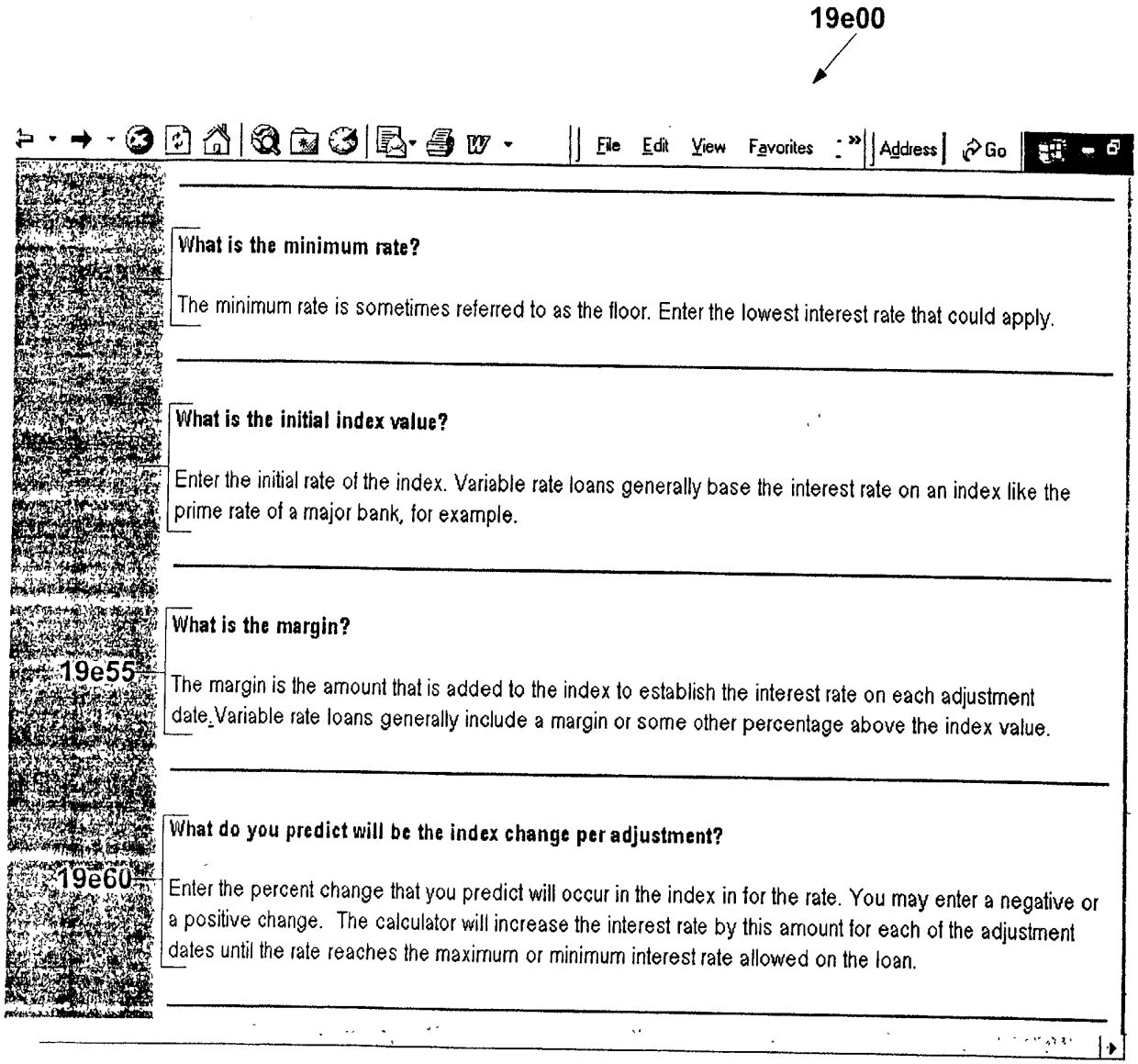
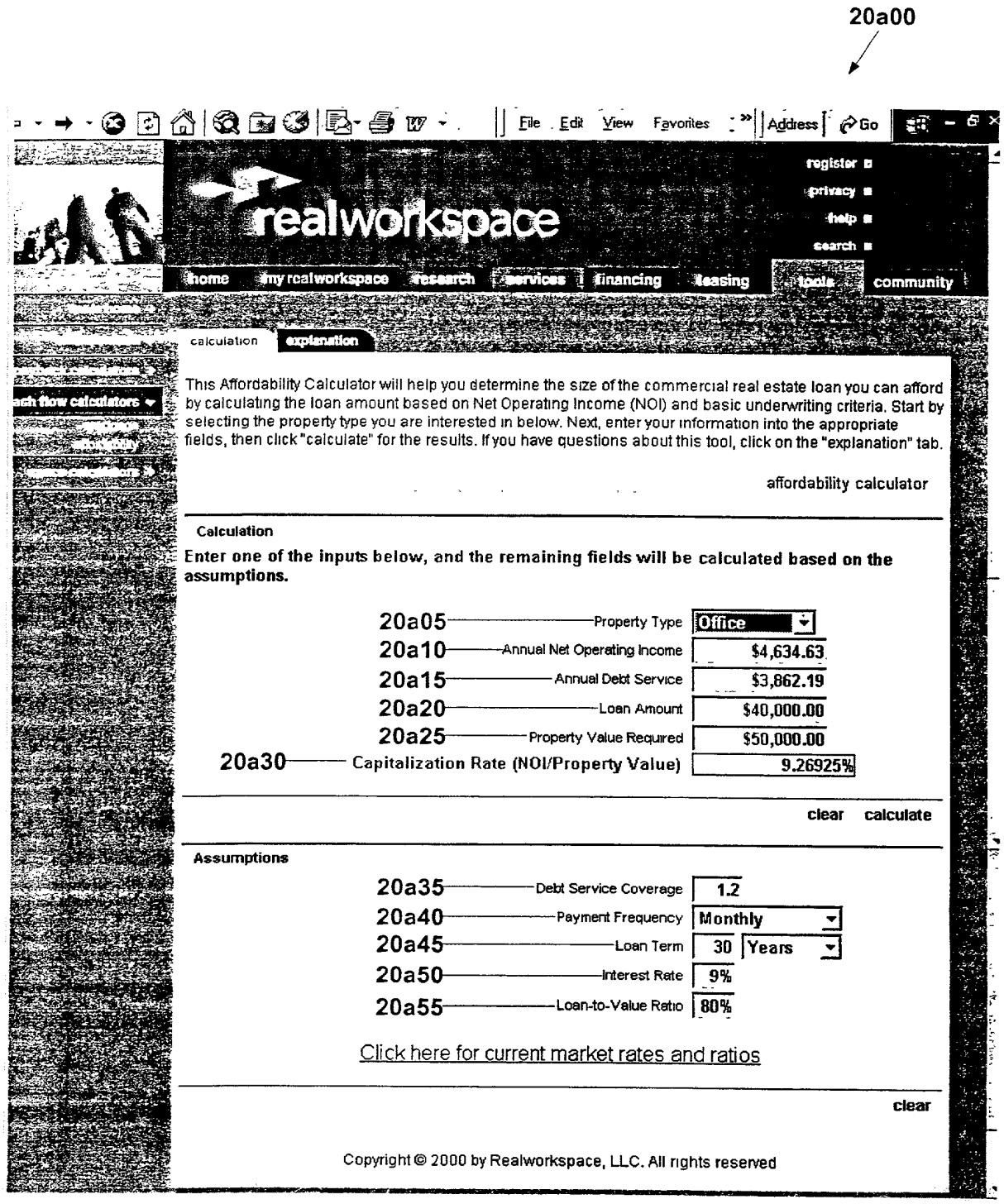

19e00
File Edit View Favorites
Address
Go
What is the minimum rate?
The minimum rate is sometimes referred to as the floor. Enter the lowest interest rate that could apply.
What is the initial index value?
Enter the initial rate of the index. Variable rate loans generally base the interest rate on an index like the prime rate of a major bank, for example.
What is the margin?
19e55
The margin is the amount that is added to the index to establish the interest rate on each adjustment date. Variable rate loans generally include a margin or some other percentage above the index value.
What do you predict will be the index change per adjustment?
19e60
Enter the percent change that you predict will occur in the index in for the rate. You may enter a negative or a positive change. The calculator will increase the interest rate by this amount for each of the adjustment dates until the rate reaches the maximum or minimum interest rate allowed on the loan.

FIG. 20a


20a00
File Edit View Favorites Address Go
realworkspace
register
privacy
help
search
home
my realworkspace
research
services
financing
leasing
tools
community
calculation
explanation
This Affordability Calculator will help you determine the size of the commercial real estate loan you can afford by calculating the loan amount based on Net Operating Income (NOI) and basic underwriting criteria. Start by selecting the property type you are interested in below. Next, enter your information into the appropriate fields, then click "calculate" for the results. If you have questions about this tool, click on the "explanation" tab.
affordability calculator
Calculation
Enter one of the inputs below, and the remaining fields will be calculated based on the assumptions.
20a05 Property Type Office
20a10 Annual Net Operating Income $4,634.63
20a15 Annual Debt Service $3,862.19
20a20 Loan Amount $40,000.00
20a25 Property Value Required $50,000.00
20a30 Capitalization Rate (NOI/Property Value) 9.26925%
clear calculate
Assumptions
20a35 Debt Service Coverage 1.2
20a40 Payment Frequency Monthly
20a45 Loan Term 30 Years
20a50 Interest Rate 9%
20a55 Loan-to-Value Ratio 80%
Click here for current market rates and ratios
clear
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20b00

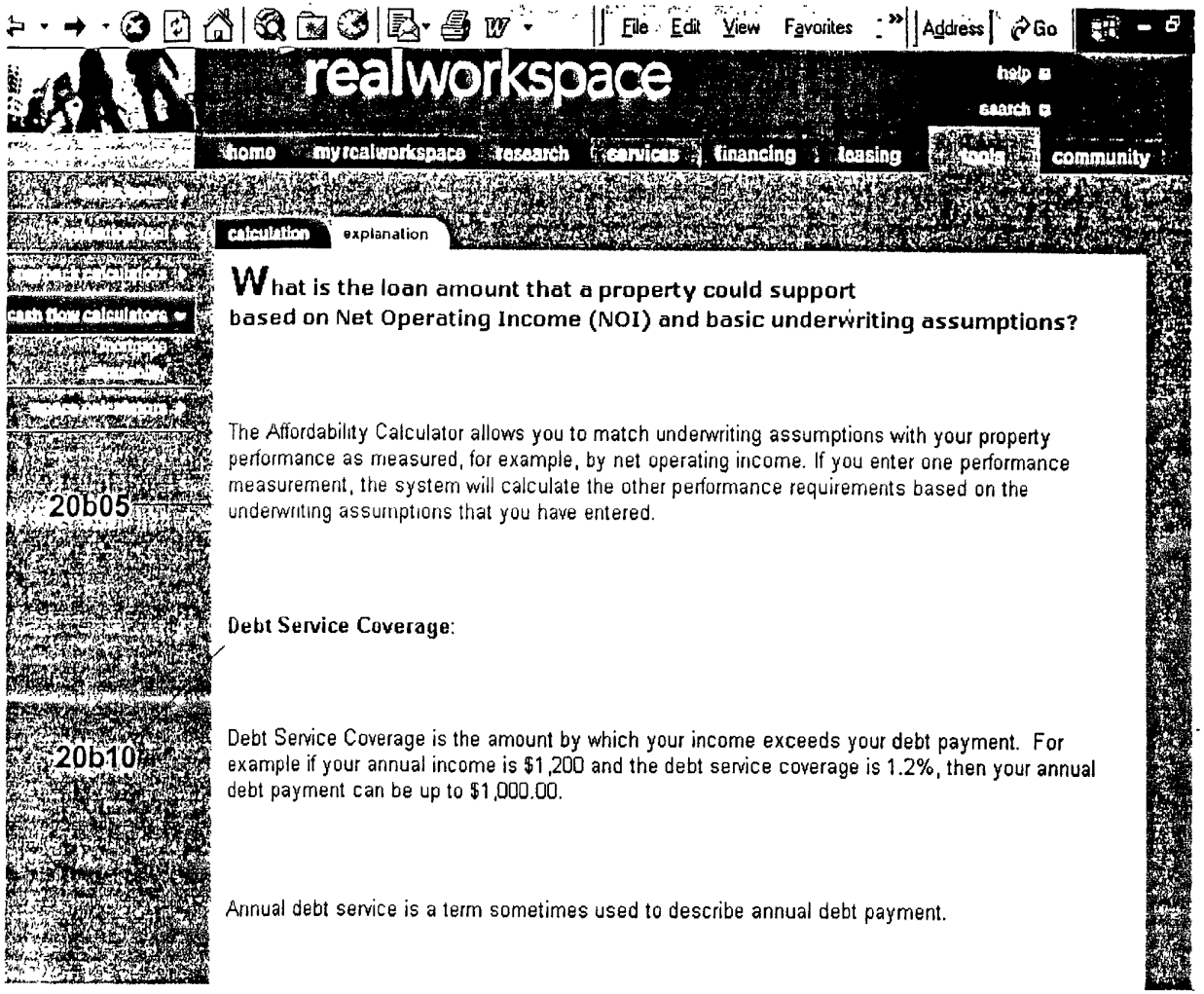


FIG. 20b

FIG. 21a

21a00

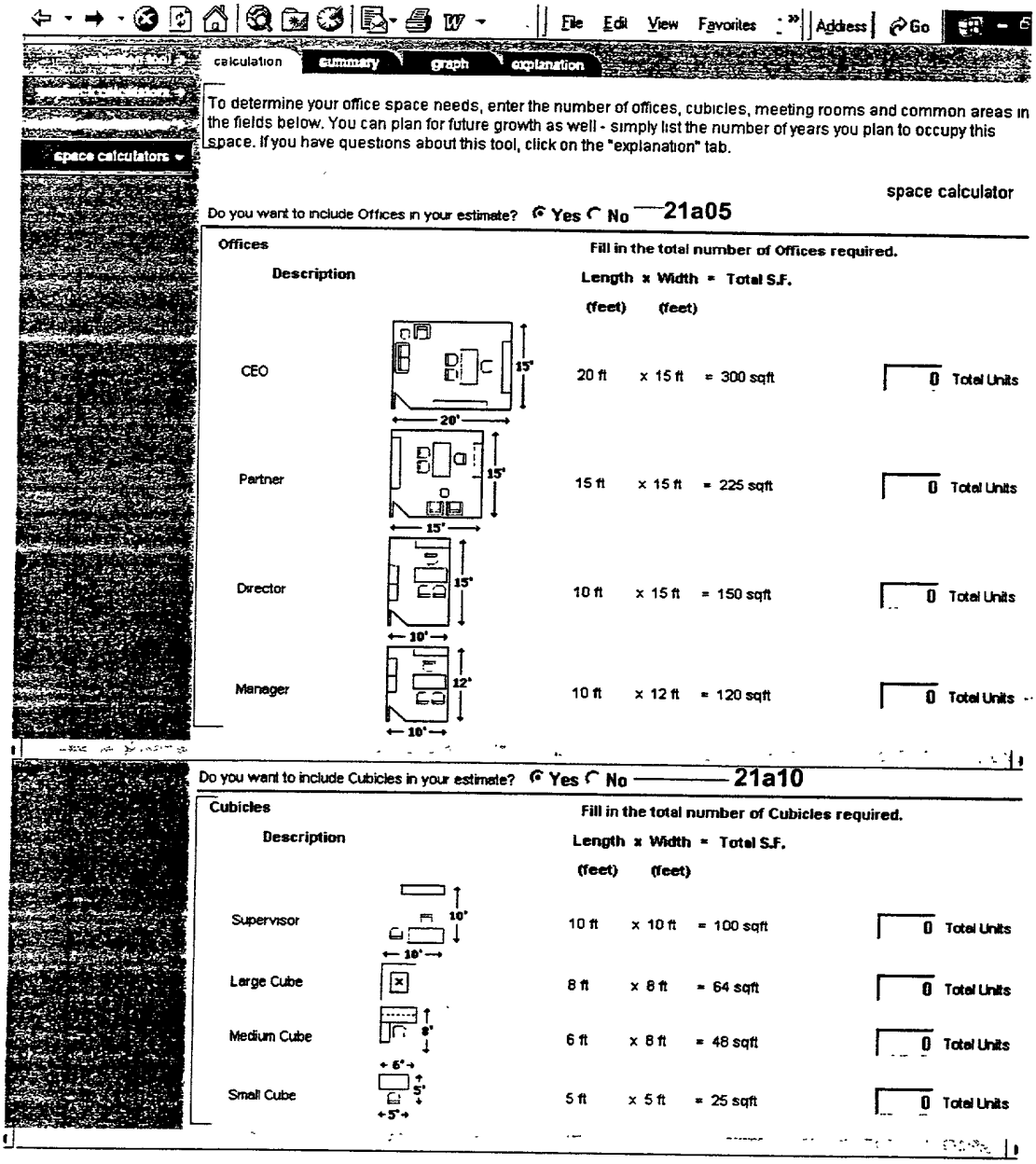
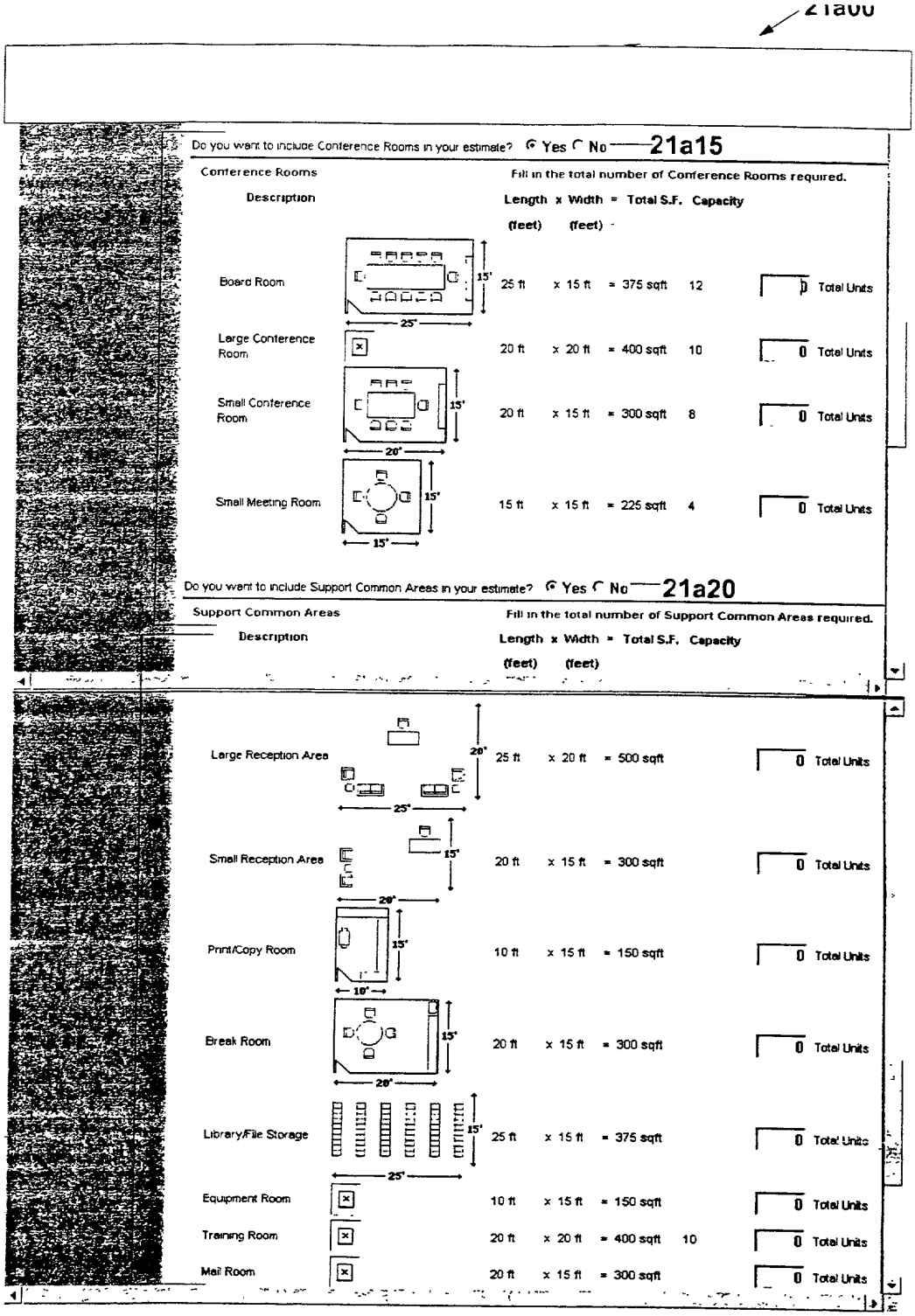
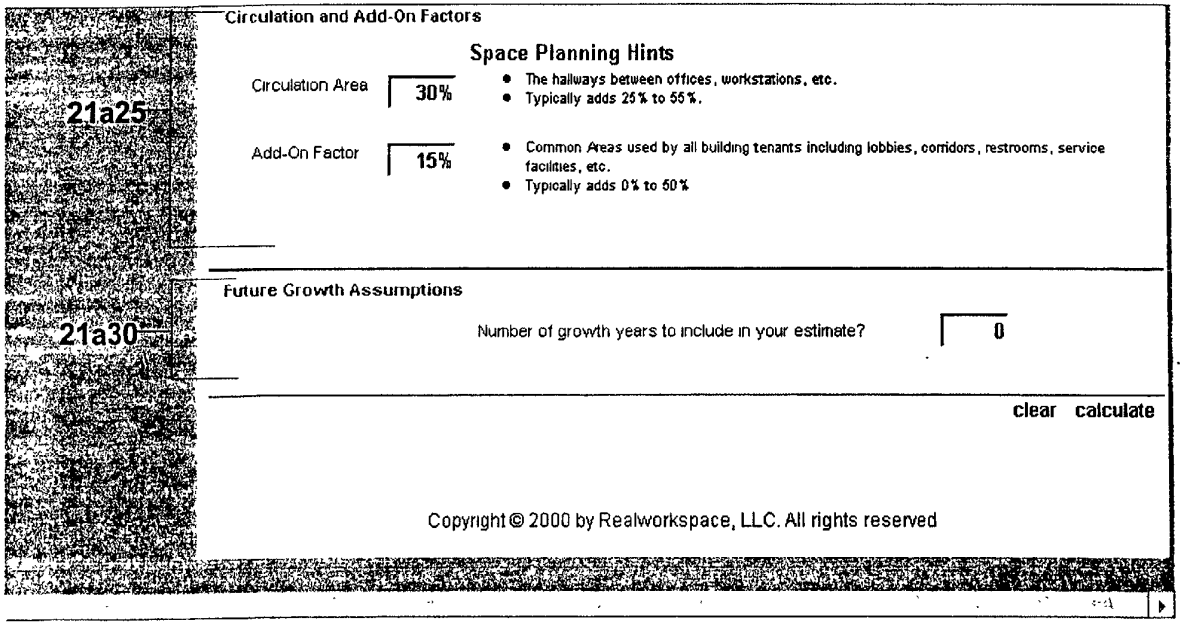


FIG. 21a (cont.)


21a00
Do you want to include Conference Rooms in your estimate? Yes No 21a15
Conference Rooms
Description
Fill in the total number of Conference Rooms required.
Length x Width = Total S.F. Capacity
(feet) (feet)
Board Room
25 ft x 15 ft = 375 sqft 12
Total Units
Large Conference Room
20 ft x 20 ft = 400 sqft 10
Total Units
Small Conference Room
20 ft x 15 ft = 300 sqft 8
Total Units
Small Meeting Room
15 ft x 15 ft = 225 sqft 4
Total Units
Do you want to include Support Common Areas in your estimate? Yes No 21a20
Support Common Areas
Description
Fill in the total number of Support Common Areas required.
Length x Width = Total S.F. Capacity
(feet) (feet)
Large Reception Area
25 ft x 20 ft = 500 sqft
Total Units
Small Reception Area
20 ft x 15 ft = 300 sqft
Total Units
Print/Copy Room
10 ft x 15 ft = 150 sqft
Total Units
Break Room
20 ft x 15 ft = 300 sqft
Total Units
Library/File Storage
25 ft x 15 ft = 375 sqft
Total Units
Equipment Room
10 ft x 15 ft = 150 sqft
Total Units
Training Room
20 ft x 20 ft = 400 sqft 10
Total Units
Mail Room
20 ft x 15 ft = 300 sqft
Total Units

21a00

FIG. 21a (cont.)



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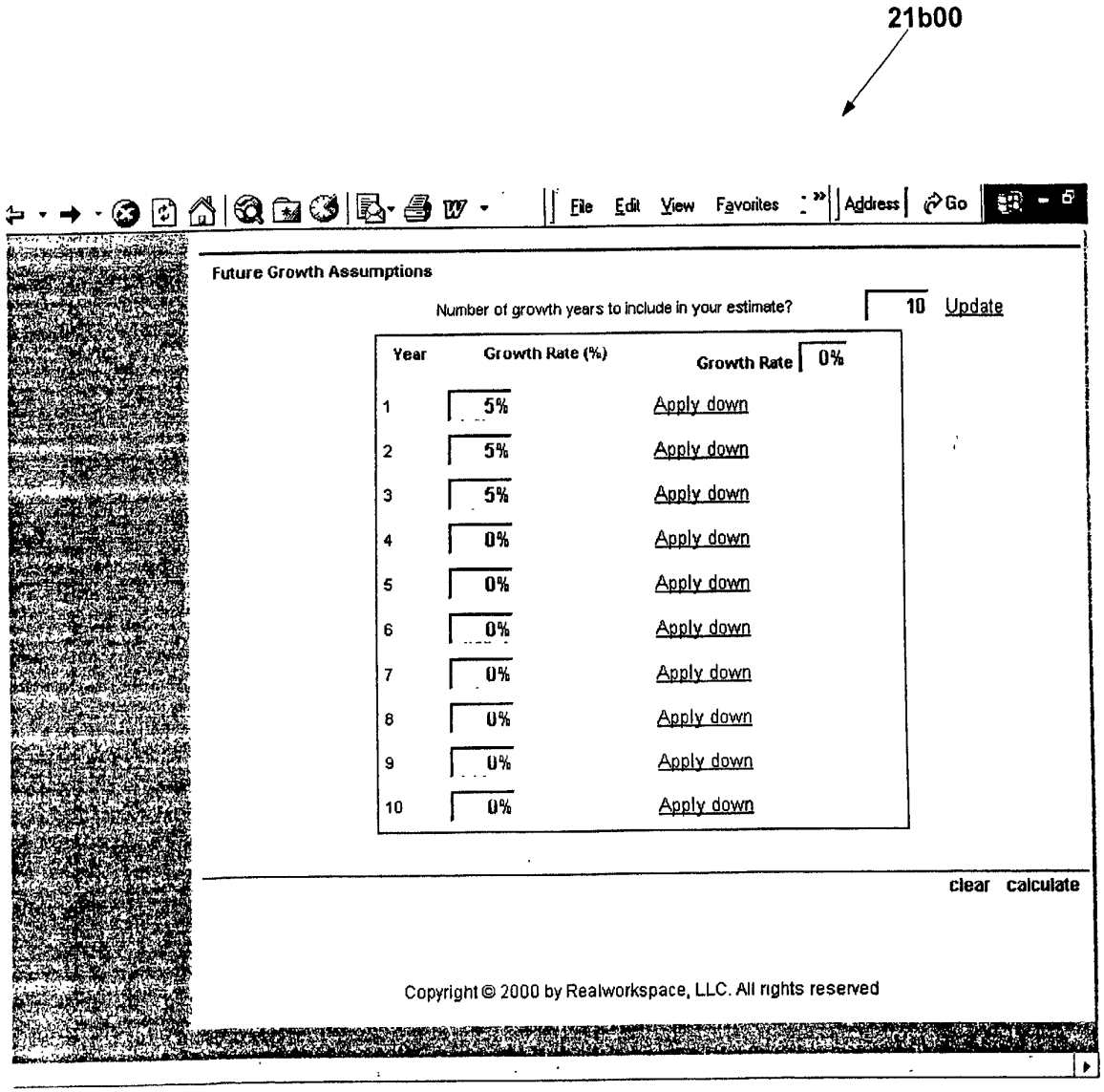
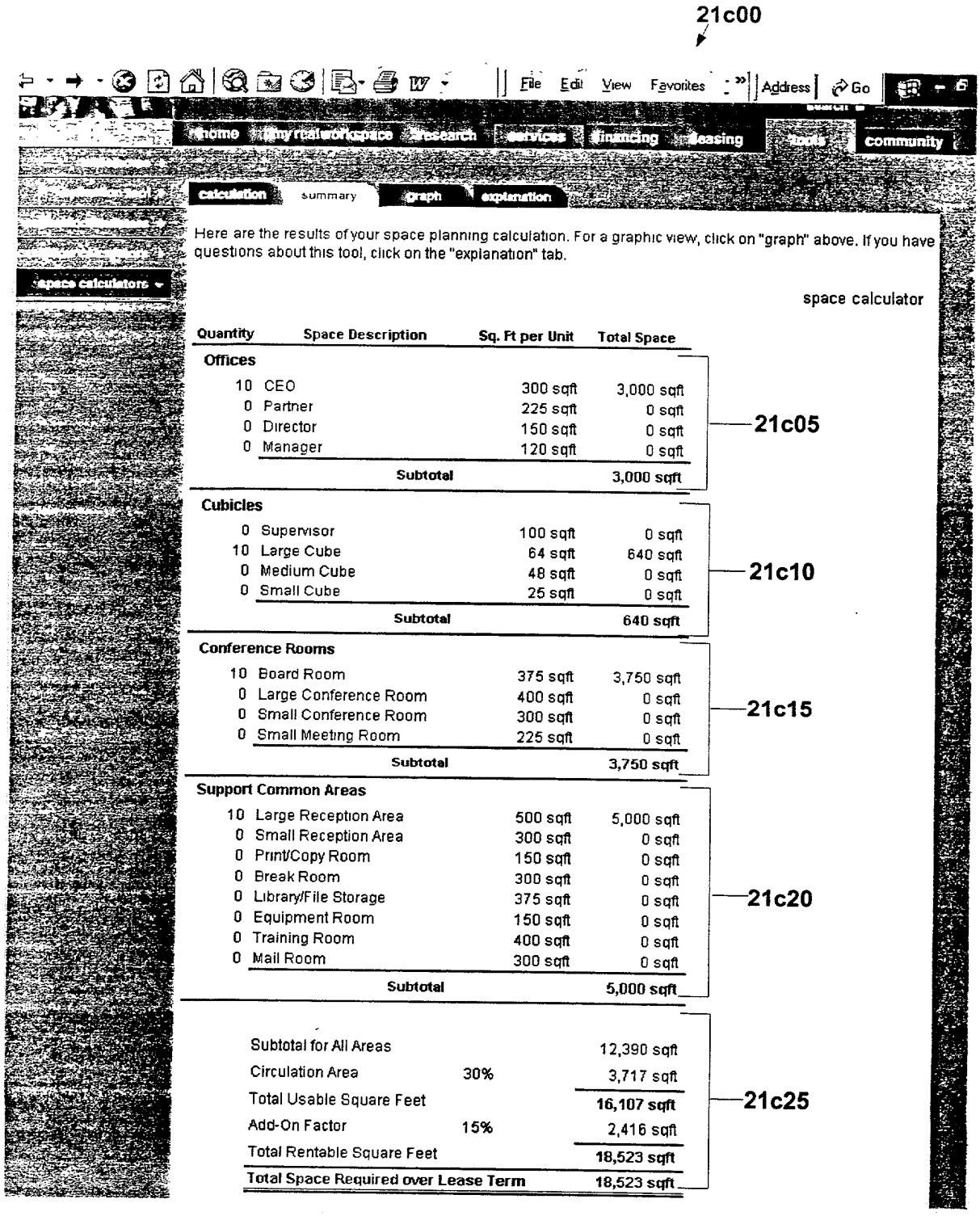


FIG. 21b

FIG. 21c


21c00
File Edit View Favorites Address Go
home my real workspace research services financing leasing tools community
calculation summary graph explanation
Here are the results of your space planning calculation. For a graphic view, click on "graph" above. If you have questions about this tool, click on the "explanation" tab.
space calculators
space calculator
Quantity Space Description Sq. Ft per Unit Total Space
Offices
10 CEO 300 sqft 3,000 sqft
0 Partner 225 sqft 0 sqft
0 Director 150 sqft 0 sqft
0 Manager 120 sqft 0 sqft
Subtotal 3,000 sqft
21c05
Cubicles
0 Supervisor 100 sqft 0 sqft
10 Large Cube 64 sqft 640 sqft
0 Medium Cube 48 sqft 0 sqft
0 Small Cube 25 sqft 0 sqft
Subtotal 640 sqft
21c10
Conference Rooms
10 Board Room 375 sqft 3,750 sqft
0 Large Conference Room 400 sqft 0 sqft
0 Small Conference Room 300 sqft 0 sqft
0 Small Meeting Room 225 sqft 0 sqft
Subtotal 3,750 sqft
21c15
Support Common Areas
10 Large Reception Area 500 sqft 5,000 sqft
0 Small Reception Area 300 sqft 0 sqft
0 Print/Copy Room 150 sqft 0 sqft
0 Break Room 300 sqft 0 sqft
0 Library/File Storage 375 sqft 0 sqft
0 Equipment Room 150 sqft 0 sqft
0 Training Room 400 sqft 0 sqft
0 Mail Room 300 sqft 0 sqft
Subtotal 5,000 sqft
21c20
Subtotal for All Areas 12,390 sqft
Circulation Area 30% 3,717 sqft
Total Usable Square Feet 16,107 sqft
Add-On Factor 15% 2,416 sqft
Total Rentable Square Feet 18,523 sqft
Total Space Required over Lease Term 18,523 sqft
21c25

21d00

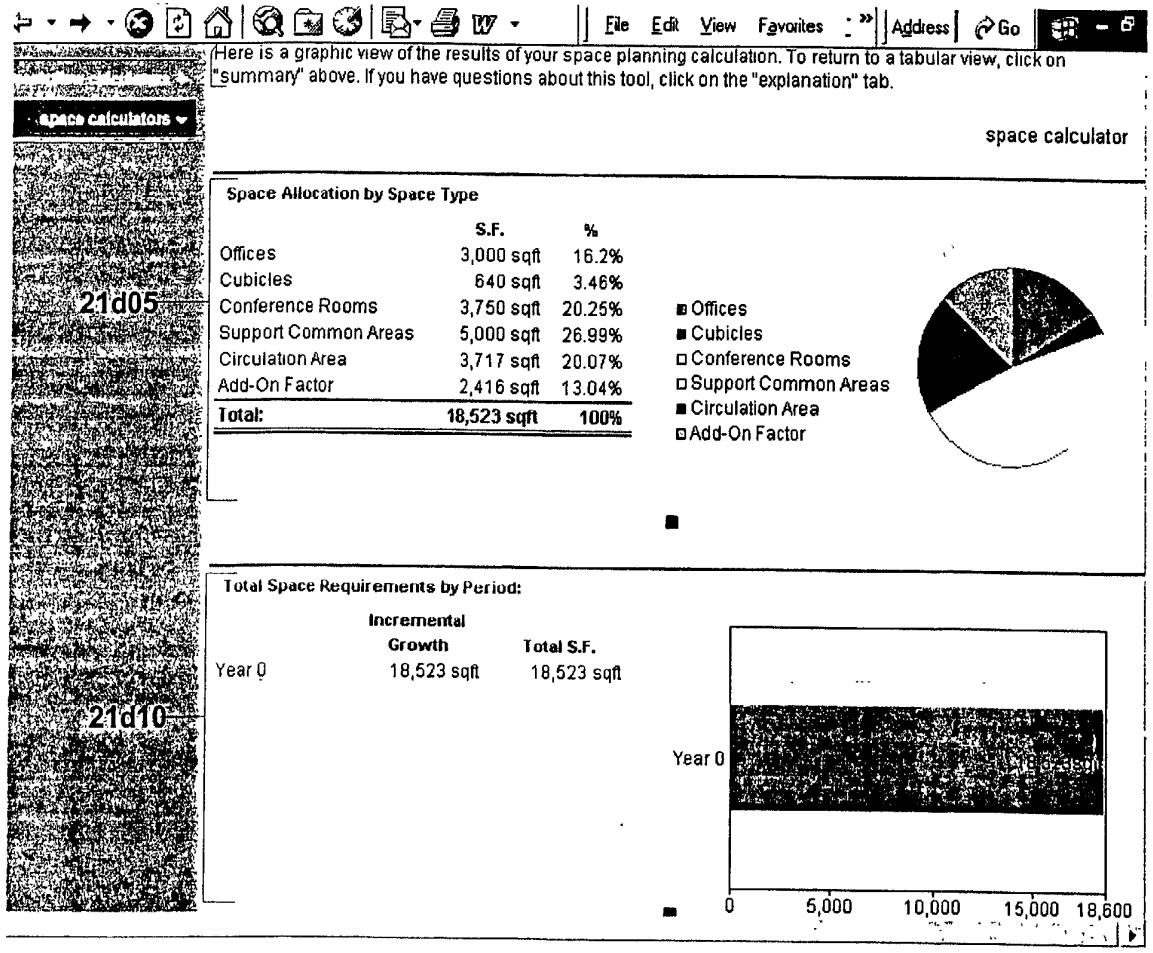


FIG. 21d

FOR050 62/393,260

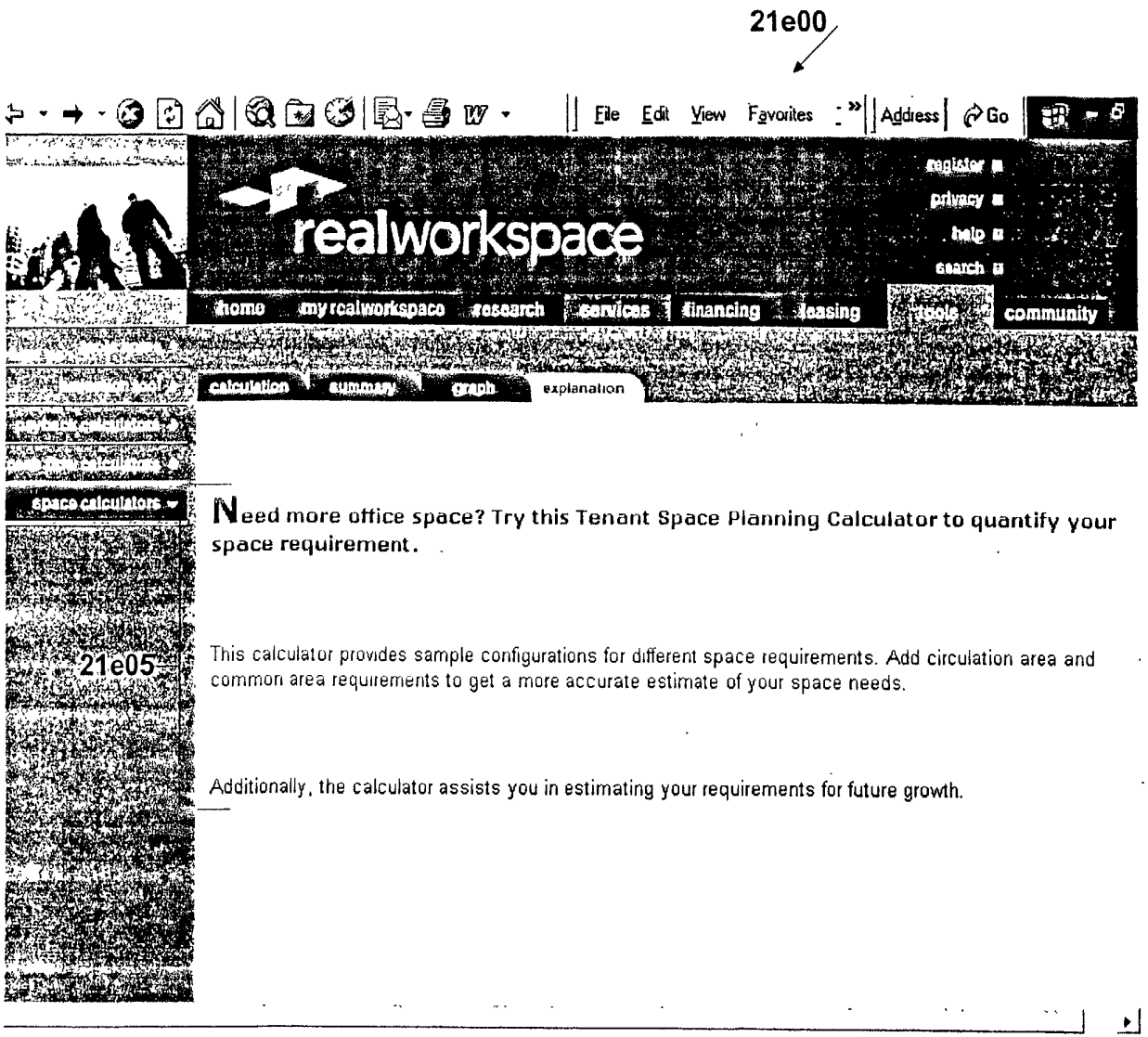



FIG. 21e